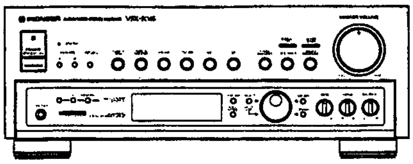
PIONEER®
The Art of Entertainment

Service Manual



ORDER NO.
RRV1248

AUDIO/VIDEO STEREO RECEIVER

VSX-504S
VSX-464S
VSX-454

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model			Power Requirement	Remarks
	VSX-504S	VSX-464S	VSX-454		
KUXJ	○	—	○	AC120V	
KCXJ	○	○	○	AC120V	

- **The " S " at the end of the model number indicates that a programable remote control unit is supplied.**

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T-DFF FEB. 1995

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

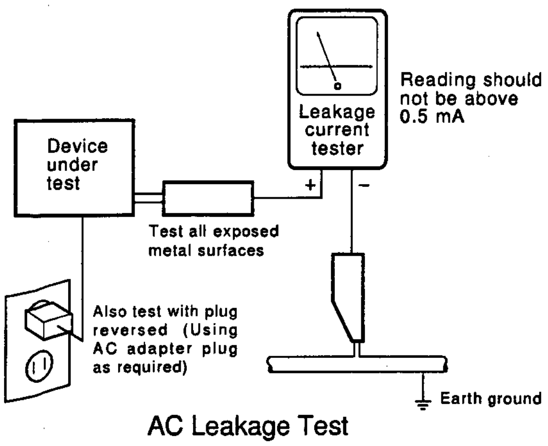
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Reading should not be above 0.5 mA
Leakage current tester
+
-
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage , etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

2.1 PACKING

■ CONTRAST OF VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ AND VSX−464S/KCXJ

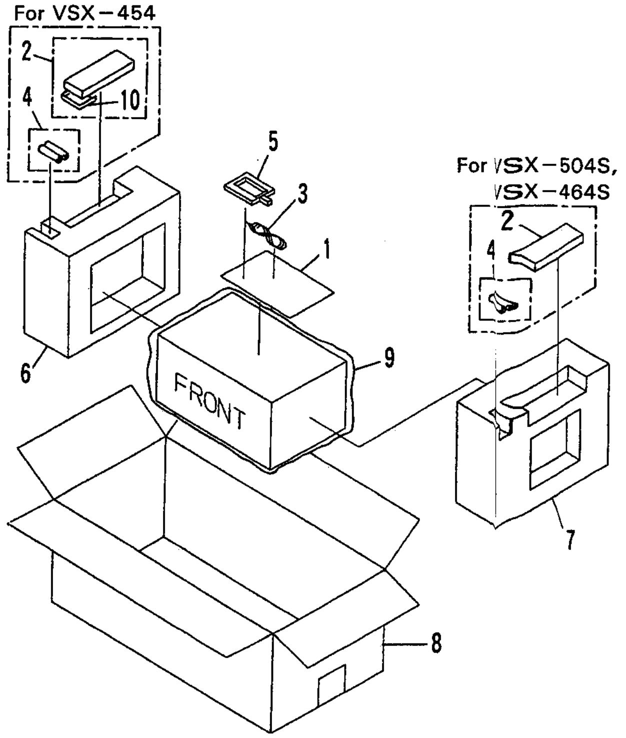
VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ and VSX−464S/KCXJ have the same construction except for the following:

Mark	No.	Description	Part No.					Remarks
			VSX−504S		VSX−454		VSX−464S	
			KUXJ	KCXJ	KUXJ	KCXJ	KCXJ	
	1	Operating instructions (English)	ARB7023	ARB7023	ARB7024	Not used	Not used	
	1	Operating instructions (French)	Not used	ARC7033	Not used	Not used	Not used	
	1	Operating instructions (English/French)	Not used	Not used	Not used	ARE7022	ARE7022	
	2	Remote control unit (CU−VSX095)	AXD7045	AXD7045	Not used	Not used	Not used	*
	2	Remote control unit (CU−VSX098)	Not used	Not used	Not used	Not used	AXD7056	*
	2	Remote control unit (CU−VSX093)	Not used	Not used	AXD7046	AXD7046	Not used	
	10	Battery cover	Not used	Not used	AZA7031	AZA7031	Not used	
NSP	4	Battery (LR03, AAA)	AEX1006	AEX1006	Not used	Not used	AEX1006	
NSP	4	Battery (R6P, AA)	Not used	Not used	VEM−013	VEM−013	Not used	
	8	Packing case	AHD7110	AHD7110	AHD7113	AHD7113	AHD7114	

*Note *: Refer to "10. REMOTE CONTROL UNIT".*

■ PARTS LIST FOR VSX−504S/KUXJ

Mark	No.	Description	Parts No.
	1	OPERATING INSTRUCTIONS (English)	ARB7023
	2	REMOTE CONTROL UNIT (CU−VSX095)	AXD7045
	3	FM ANTENNA	ADH1017
NSP	4	BATTERY (LR03 ,AAA)	AEX1006
	5	LOOP ANTENNA	ATB7004
	6	SIDE PAD L	AHA7044
	7	SIDE PAD R	AHA7045
	8	PACKING CASE	AHD7110
	9	PACKING SHEET	AHG7010



2.2 EXTERIOR

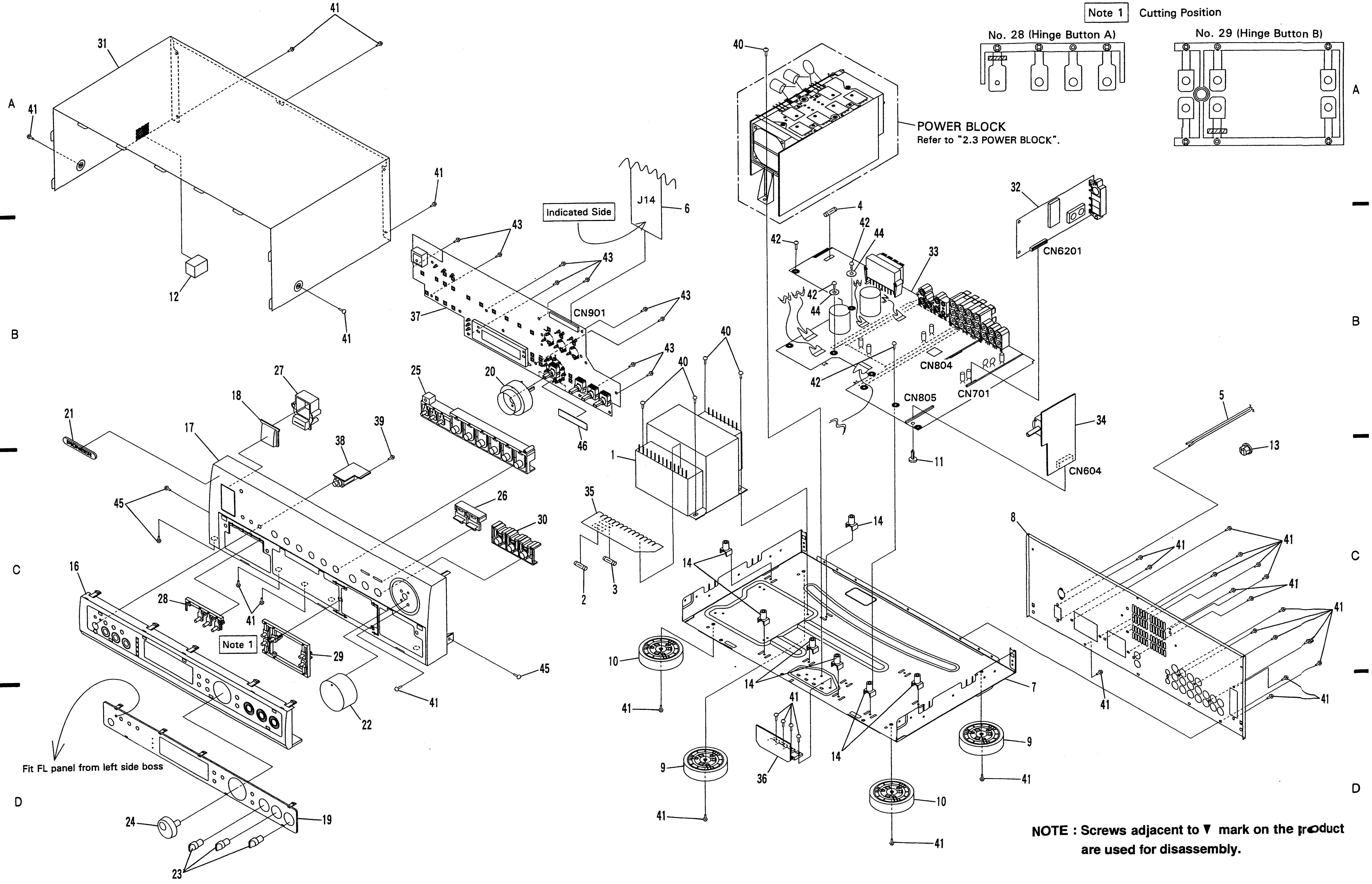
■ CONTRAST OF VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ AND VSX−464S/KCXJ

VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ and VSX−464S/KCXJ have the same construction except for the following:

Mark	No.	Description	Part No.					Remarks
			VSX−504S		VSX−454		VSX−464S	
			KUXJ	KCXJ	KUXJ	KCXJ	KCXJ	
	33	PS AND FUNC assy	AWZ7597	AWZ7597	AWZ7601	AWZ7601	AWZ7601	
	37	FL AND UCOM assy	AWZ7599	AWZ7599	AWZ7603	AWZ7603	AWZ7603	
⚠	1	Power transformer (AC120V, T1)	ATS7049	ATS7049	ATS7048	ATS7052	ATS7052	
⚠	4	Fuse (10A, FU1)	REK1087	REK1087	Not used	Not used	Not used	
⚠	4	Fuse (8A, FU1)	Not used	Not used	REK1086	REK1086	REK1086	
	8	Rear panel	ANC7172	ANC7172	ANC7200	ANC7199	ANC7202	
	16	Sub panel	AAP7011	AAP7011	AAP7012	AAP7012	AAP7012	
	17	Front panel	AMB7177	AMB7177	AMB7179	AMB7179	AMB7180	
	19	FL panel	AAK7125	AAK7125	AAK7126	AAK7126	AAK7126	
	28	Hinge button A	AAD7159	AAD7159	Not used	Not used	Not used	

■ PARTS LIST FOR VSX−504S/KUXJ

Mark	No.	Description	Parts No.
⚠	1	POWER TRANSFORMER (T1)	ATS7049
⚠	2	FUSE (1.25A, FU3)	REK1076
⚠	3	FUSE (1.25A, FU4)	REK1076
⚠	4	FUSE (10A, FU1)	REK1087
⚠	5	AC POWER CORD	PDG1015
	6	FLEXIBLE CABLE (J14)	ADD7005
NSP	7	CHASSIS	ANA7016
	8	REAR PANEL	ANC7172
	9	INSULATOR ASSY	DXA1490
	10	INSULATOR	PNW1912
	11	PCB SUPPORT	AEC1581
	12	RUBBER SPACER	AEC7034
	13	CORD STOPPER	AEP−113
	14	PCB MOLD	AMR2533
	15	....	
	16	SUB PANEL	AAP7011
	17	FRONT PANEL	AMB7177
	18	IR FILTER	AAK7123
	19	FL PANEL	AAK7125
	20	JOG RING	AAK7129
	21	NAME PLATE	PAM1608
	22	ROUND KNOB L	AAB1390
	23	ROUND KNOB S	AAB7047
	24	JOG KNOB	AAB7048
	25	FUNCTION BUTTON	AAD7156
	26	ILLUMI BUTTON	AAD7157
	27	POWER BUTTON	AAD7158
	28	HINGE BUTTON A	AAD7159
	29	HINGE BUTTON B	AAD7160
	30	SURROUND BUTTON	AAD7161
	31	BONNET CASE	ANE7047
	32	FM/AM TUNER MODULE	AXQ3112
	33	PS AND FUNC ASSY	AWZ7597
	34	VOL. ASSY	AWZ7602
NSP	35	TRANS ASSY	AWZ7591
	36	REG. ASSY	AWZ7592
	37	FL AND UCOM ASSY	AWZ7599
NSP	38	H.P. ASSY	AWZ7594
	39	SCREW	ABA7009
	40	SCREW	ABA1147
	41	SCREW	BBZ30P080FZK
	42	SCREW	BBZ30P200FMC
	43	SCREW	BPZ26P080FMC
NSP	44	WASHER	AEE7002
	45	SCREW	BBZ30P080FMC
NSP	46	ADHESIVE DOUBLE COATED TAPE	AEH1025


1
2
3
4
A
B
C
D
Note 1 Cutting Position
No. 28 (Hinge Button A)
No. 29 (Hinge Button B)
POWER BLOCK
Refer to "2.3 POWER BLOCK".
Indicated Side
J14
CN901
CN6201
CN804
CN805
CN701
CN604
Note 1
Fit FL panel from left side boss
1
2
3
4
5
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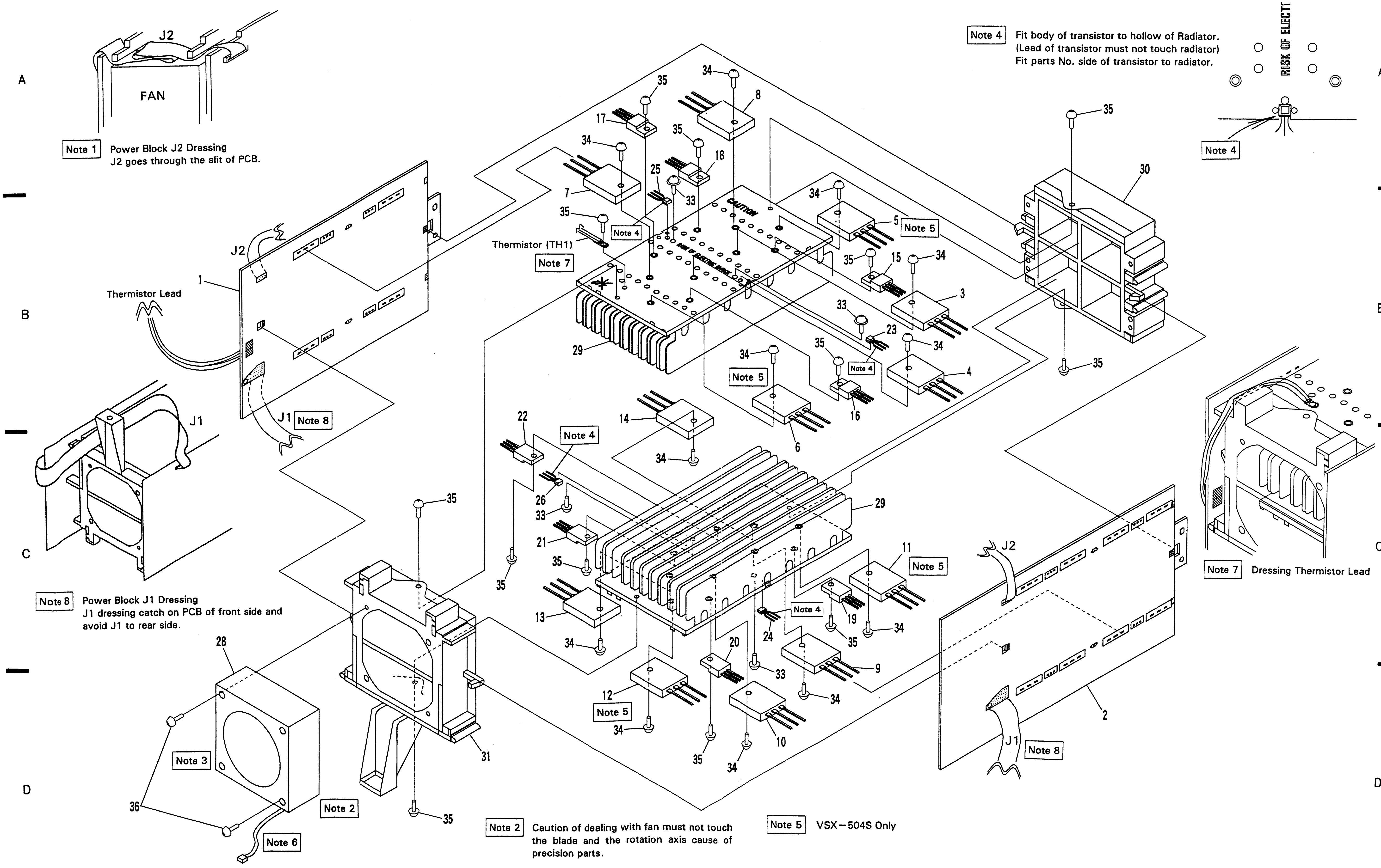
46

NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

2.3 POWER BLOCK


3
4
5
6
A
B
C
D
J2
FAN
J2
1
Thermistor Lead
J1
J1
28
36
31
35
7
8
17
18
25
33
34
35
Thermistor (TH1)
CAUTION
RISK OF ELECTRIC SHOCK
29
5
15
3
23
4
16
6
14
22
26
21
13
11
19
24
20
9
12
10
29
30
J2
J1
2
RISK OF ELECTI
Note 1
Note 2
Note 3
Note 4
Note 5
Note 6
Note 7
Note 8

Note 1 Power Block J2 Dressing
J2 goes through the slit of PCB.

Note 4 Fit body of transistor to hollow of Radiator.
(Lead of transistor must not touch radiator)
Fit parts No. side of transistor to radiator.

Note 7 Dressing Thermistor Lead

Note 8 Power Block J1 Dressing
J1 dressing catch on PCB of front side and
avoid J1 to rear side.

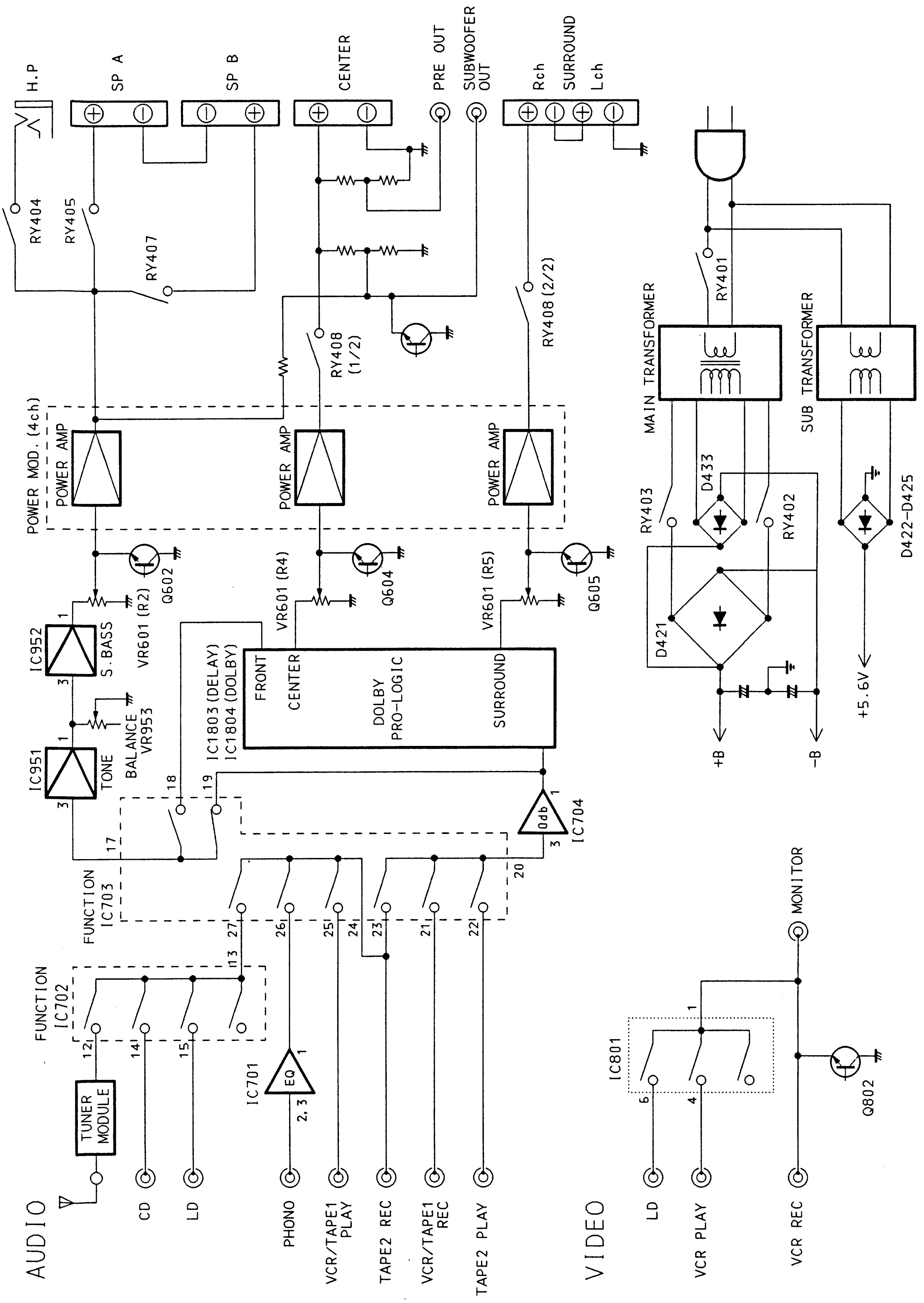
Note 2 Caution of dealing with fan must not touch the blade and the rotation axis cause of precision parts.

Note 5 VSX−504S Only

Note 3 Set side without fan guard facing out side
(The other side of parts No. side).

Note 6 Install fan motor to do right-down fan lead.

3. BLOCK DIAGRAM


H.P
SP A
SP B
CENTER
PRE OUT
SUBWOOFER OUT
Rch
SURROUND
Lch
RY404
RY405
RY407
RY408 (1/2)
RY408 (2/2)
RY401
MAIN TRANSFORMER
SUB TRANSFORMER
POWER MOD. (4ch)
POWER AMP
POWER AMP
POWER AMP
D433
RY403
RY402
D422-D425
Q602
Q604
Q605
D421
VR601 (R2)
VR601 (R4)
VR601 (R5)
IC952
S.BASS
BALANCE VR953
IC951
TONE
IC1803 (DELAY)
IC1804 (DOLBY)
FRONT
CENTER
DOLBY PRO-LOGIC
SURROUND
+B
-B
+5.6V
IC704
0db
FUNCTION IC703
FUNCTION IC702
TUNER MODULE
IC701
EQ
MONITOR
IC801
Q802
AUDIO
CD
LD
PHONO
VCR/TAPE1 PLAY
TAPE2 REC
VCR/TAPE1 REC
TAPE2 PLAY
VIDEO
LD
VCR PLAY
VCR REC
1
3
1
3
17
18
19
1
3
20
27
26
25
24
23
21
22
13
12
14
15
1
2, 3
1
6
4

■ CONTRAST OF VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ AND VSX−464S/KCXJ

VSX−504S/KUXJ, KCXJ, VSX−454/KUXJ, KCXJ and VSX−464S/KCXJ have the same construction except for the following:

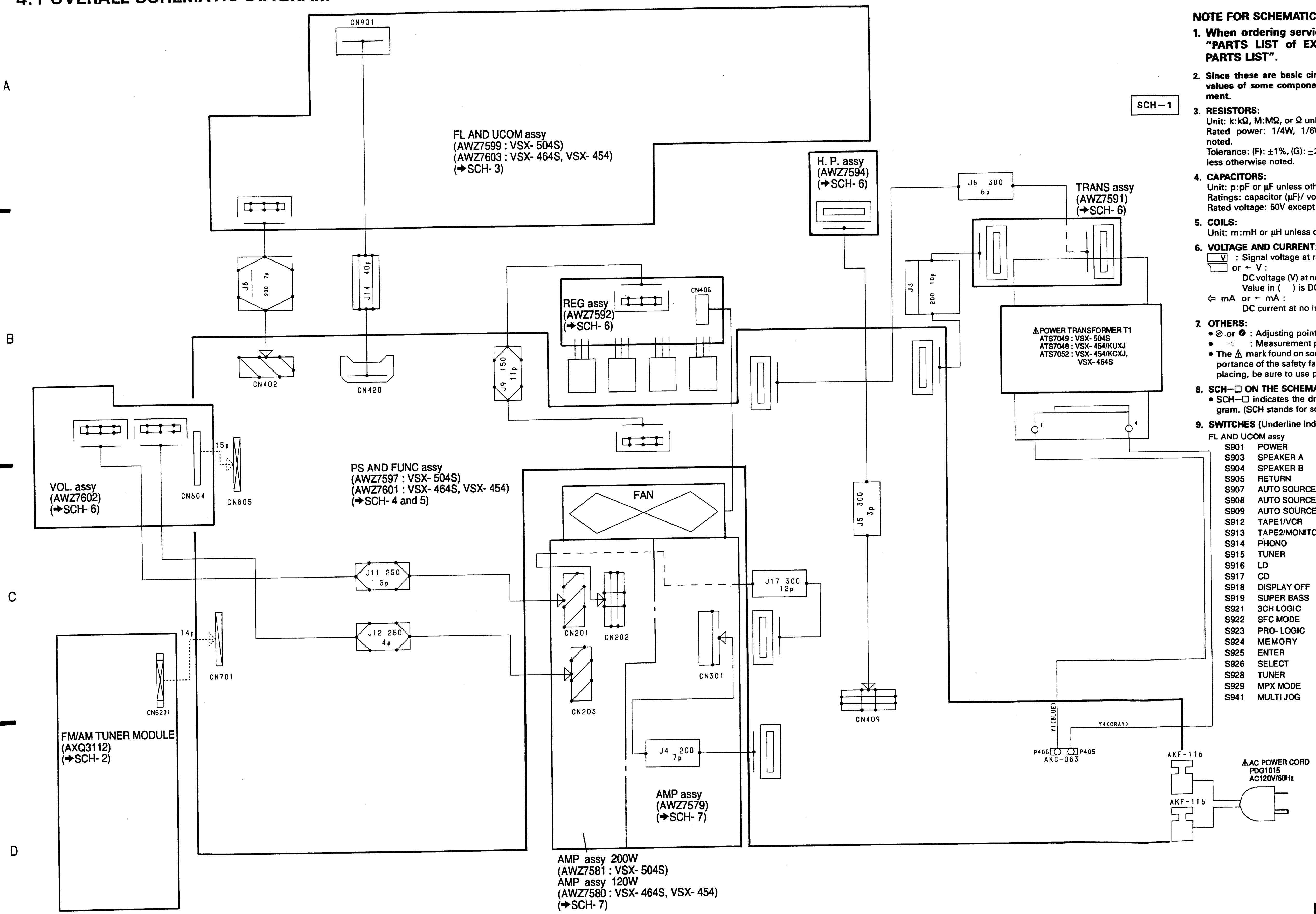
Mark	No.	Description	Part No.					Remarks
			VSX−504S		VSX−454		VSX−464S	
			KUXJ	KCXJ	KUXJ	KCXJ	KCXJ	
	2	AMP assy 200W	AWZ7581	AWZ7581	Not used	Not used	Not used	
	2	AMP assy 120W	Not used	Not used	AWZ7580	AWZ7580	AWZ7580	
⚠	5	Transistor (Q7)	2SA1302	2SA1302	Not used	Not used	Not used	
⚠	6	Transistor (Q8)	2SA1302	2SA1302	Not used	Not used	Not used	
⚠	11	Transistor (Q5)	2SC3281	2SC3281	Not used	Not used	Not used	
⚠	12	Transistor (Q6)	2SC3281	2SC3281	Not used	Not used	Not used	
NSP	29	Radiator	ANH7012	ANH7012	ANH7011	ANH7011	ANH7011	

■ PARTS LIST FOR VSX−504S/KUXJ

Mark	No.	Description	Parts No.
	1	AMP ASSY	AWZ7579
	2	AMP ASSY 200W	AWZ7581
⚠	3	TRANSISTOR (Q3)	2SA1302
⚠	4	TRANSISTOR (Q4)	2SA1302
⚠	5	TRANSISTOR (Q7)	2SA1302
⚠	6	TRANSISTOR (Q8)	2SA1302
⚠	7	TRANSISTOR (Q11)	2SA1302
⚠	8	TRANSISTOR (Q12)	2SA1302
⚠	9	TRANSISTOR (Q1)	2SC3281
⚠	10	TRANSISTOR (Q2)	2SC3281
⚠	11	TRANSISTOR (Q5)	2SC3281
⚠	12	TRANSISTOR (Q6)	2SC3281
⚠	13	TRANSISTOR (Q9)	2SC3281
⚠	14	TRANSISTOR (Q10)	2SC3281
⚠	15	TRANSISTOR (Q23)	2SA1837
⚠	16	TRANSISTOR (Q24)	2SA1837
⚠	17	TRANSISTOR (Q33)	2SA1837
⚠	18	TRANSISTOR (Q34)	2SA1837
⚠	19	TRANSISTOR (Q21)	2SC4793
⚠	20	TRANSISTOR (Q22)	2SC4793
⚠	21	TRANSISTOR (Q31)	2SC4793
⚠	22	TRANSISTOR (Q32)	2SC4793
⚠	23	TRANSISTOR (Q209)	2SC1740S
⚠	24	TRANSISTOR (Q210)	2SC1740S
⚠	25	TRANSISTOR (Q309)	2SC1740S
⚠	26	TRANSISTOR (Q310)	2SC1740S
	27	…………………	
	28	FAN MOTOR	AXM7005
NSP	29	RADIATOR	ANH7012
	30	EXHAUST MOLD	AMR7035
	31	RADIATOR MOLD	AMR7036
	32	…………………	
	33	SCREW	ABA−283
	34	SCREW	ABA1037
	35	SCREW	BBZ30P080FZK
	36	SCREW	BPZ30P350FZK

4. SCHEMATIC AND PCB CONNECTION DIAGRAMS

4.1 OVERALL SCHEMATIC DIAGRAM


CN901
FL AND UCOM assy
(AWZ7599 : VSX- 504S)
(AWZ7603 : VSX- 464S, VSX- 454)
(→SCH- 3)
J8 200 7p
J14 40p
CN402
CN420
J9 150 11p
REG assy
(AWZ7592)
(→SCH- 6)
CN406
H. P. assy
(AWZ7594)
(→SCH- 6)
J6 300 6p
TRANS assy
(AWZ7591)
(→SCH- 6)
J3 200 10p
ΔPOWER TRANSFORMER T1
ATS7049 : VSX- 504S
ATS7048 : VSX- 454/KUXJ
ATS7052 : VSX- 454/KCXJ, VSX- 464S
1
4
SCH−1
VOL. assy
(AWZ7602)
(→SCH- 6)
CN604
15p
CN805
PS AND FUNC assy
(AWZ7597 : VSX- 504S)
(AWZ7601 : VSX- 464S, VSX- 454)
(→SCH- 4 and 5)
FAN
J5 300 3p
J11 250 5p
J12 250 4p
J17 300 12p
CN201
CN202
CN203
CN301
CN409
14p
CN701
CN6201
FM/AM TUNER MODULE
(AXQ3112)
(→SCH- 2)
J4 200 7p
AMP assy
(AWZ7579)
(→SCH- 7)
Y1(BLUE)
Y4(GRAY)
P406
P405
AKC-083
AKF-116
AKF-116
ΔAC POWER CORD
PDG1015
AC120V/60Hz

AMP assy 200W
(AWZ7581 : VSX- 504S)
AMP assy 120W
(AWZ7580 : VSX- 464S, VSX- 454)
(→SCH- 7)

NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   V : Signal voltage at rated output.
   or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇦ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ● : Adjusting point.
   - : Measurement point.
   - The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH–□ ON THE SCHEMATIC DIAGRAM:**
   - SCH–□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

FL AND UCOM assy

S901	POWER
S903	SPEAKER A
S904	SPEAKER B
S905	RETURN
S907	AUTO SOURCE CONTROL 1 (VSX- 504S ONLY)
S908	AUTO SOURCE CONTROL 2 (VSX- 504S ONLY)
S909	AUTO SOURCE CONTROL MEMORY (VSX- 504S ONLY)
S912	TAPE1/VCR
S913	TAPE2/MONITOR
S914	PHONO
S915	TUNER
S916	LD
S917	CD
S918	DISPLAY OFF
S919	SUPER BASS
S921	3CH LOGIC
S922	SFC MODE
S923	PRO- LOGIC
S924	MEMORY
S925	ENTER
S926	SELECT
S928	TUNER
S929	MPX MODE
S941	MULTI JOG

4.2 FM/AM TUNER MODULE

NOTE : VOLTAGE AND CURRENT

mV : Signal voltage at FM 1kHz, 100% MOD.

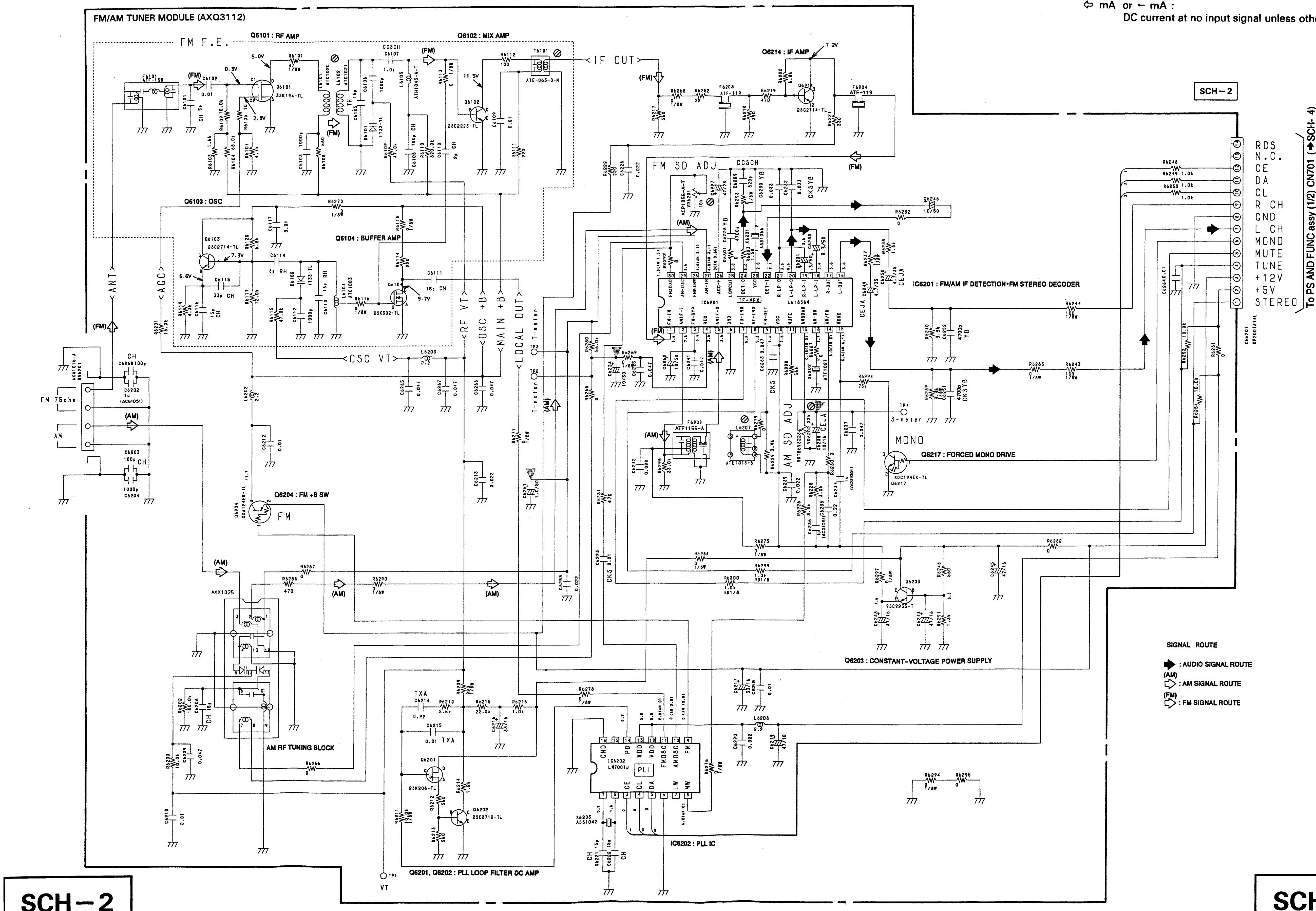
or ← V :

DC voltage (V) at no input signal unless otherwise noted.

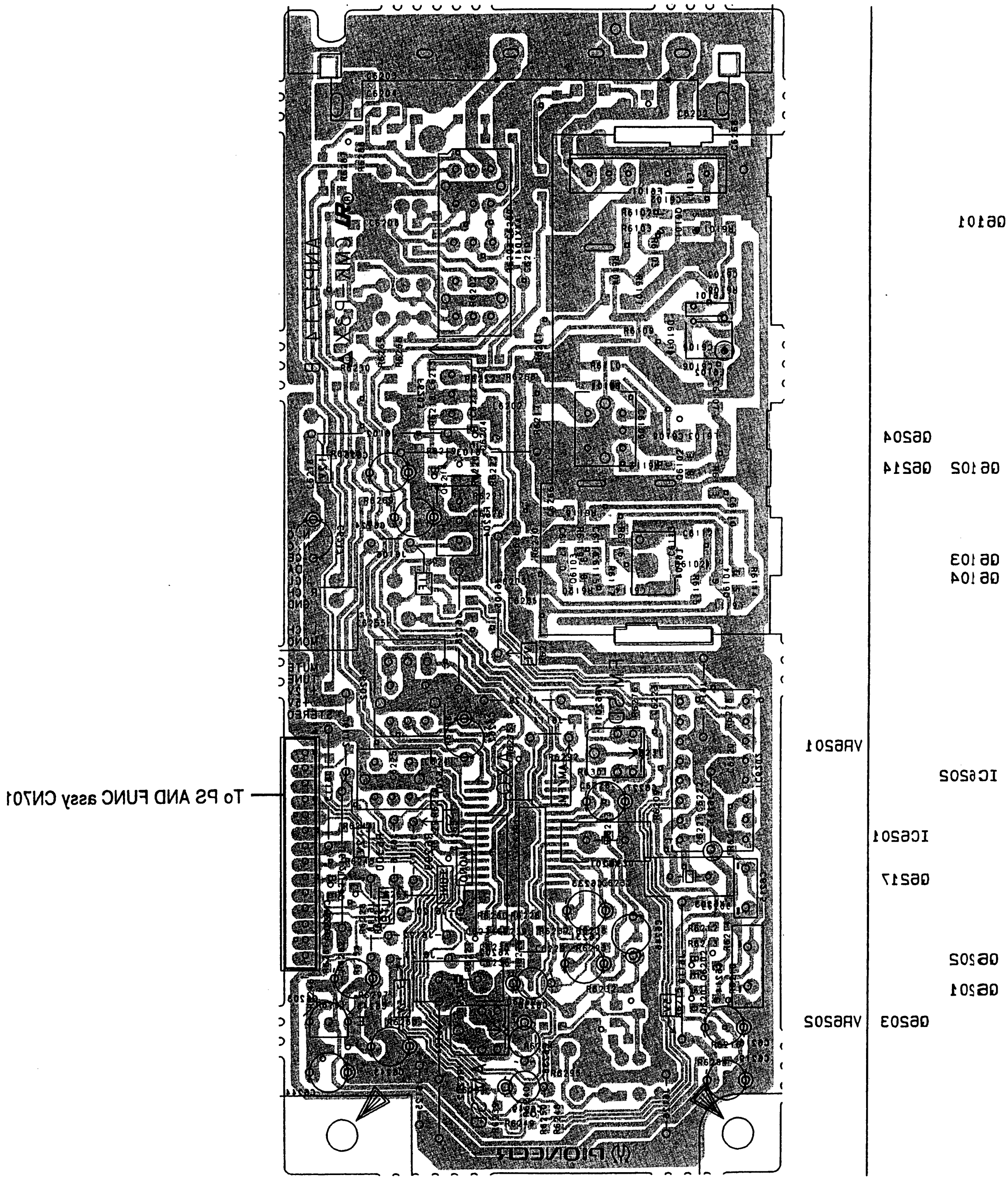
Value in ( ) is DC voltage at rated power.

⇦ mA or ← mA :

DC current at no input signal unless otherwise noted.

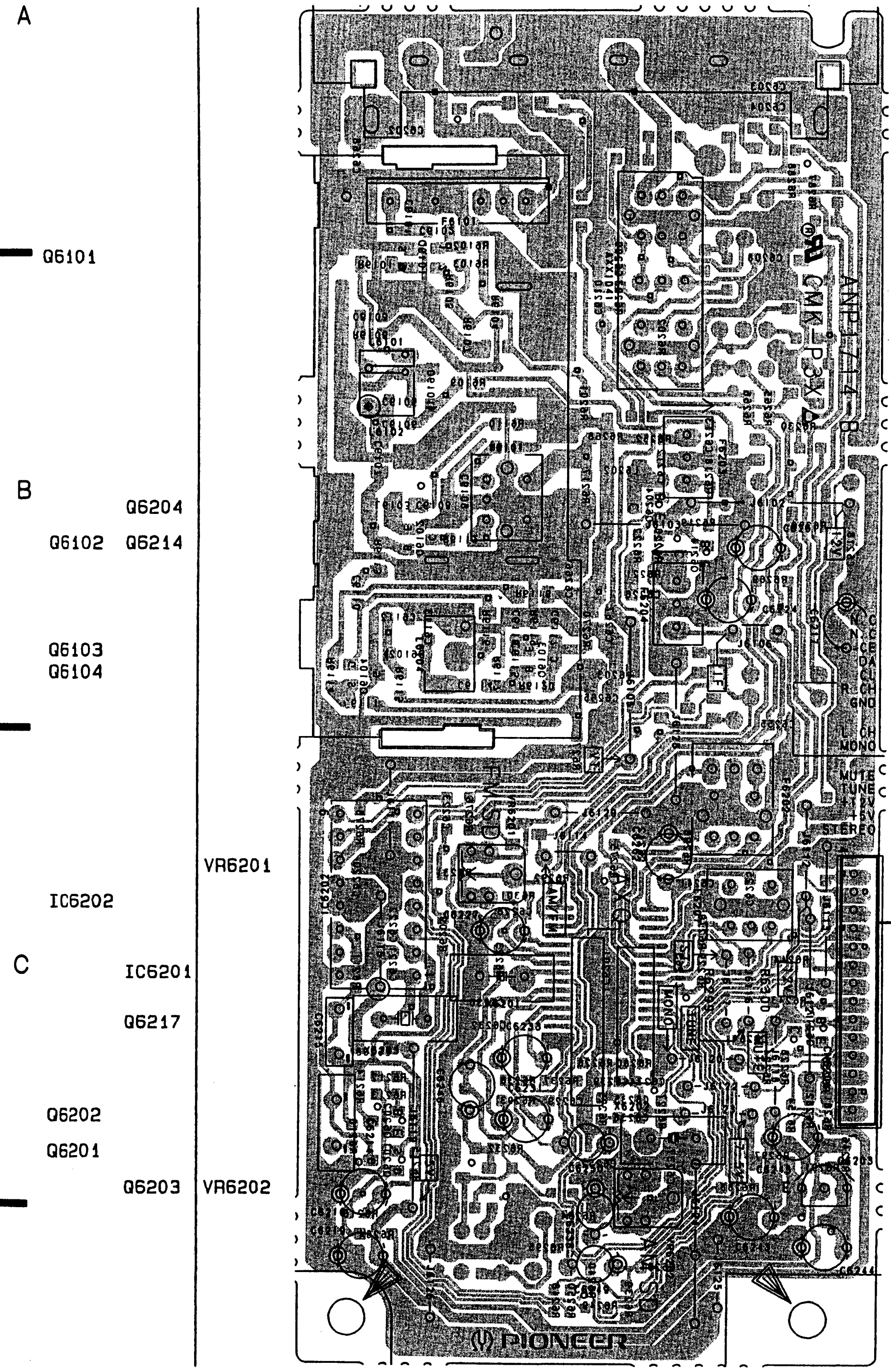

FM/AM TUNER MODULE (AXQ3112)
FM F.E.
Q6101 : RF AMP
Q6102 : MIX AMP
IF OUT
Q6214 : IF AMP
SCH-2
Q6103 : OSC
Q6104 : BUFFER AMP
ANT
AGC
RF VT
OSC +B
MAIN +B
LOCAL OUT
OSC VT
T-meter
FM SD ADJ
CCSCH
IC6201 : FM/AM IF DETECTION•FM STEREO DECODER
LA1836N
IF+MPX
RDS
N.C.
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
To PS AND FUNC assy (1/2) CN701 (➜SCH- 4)
FM 75ohm
AM
Q6204 : FM +B SW
FM
AM SD ADJ
S-meter
MONO
Q6217 : FORCED MONO DRIVE
CEJA
CKS
AXX1025
AM RF TUNING BLOCK
Q6203 : CONSTANT-VOLTAGE POWER SUPPLY
TXA
IC6202 : PLL IC
LM7001J
PLL
Q6201, Q6202 : PLL LOOP FILTER DC AMP
VT
SIGNAL ROUTE
➡ : AUDIO SIGNAL ROUTE
(AM) ⇨ : AM SIGNAL ROUTE
(FM) ⇨ : FM SIGNAL ROUTE

FM/AM TUNER MODULE


Q6101
Q6204
Q6102 Q6214
Q6103
Q6104
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
Q6203 VR6202
To PS AND FUNC assy CN701
PIONEER

- This diagram is viewed from the foil side.

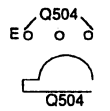
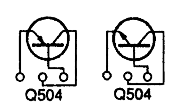
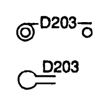
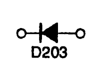
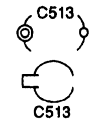
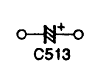
FM/AM TUNER MODULE


A
B
C
D
Q6101
Q6204
Q6102
Q6214
Q6103
Q6104
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
Q6203
VR6202
N.C
N.C
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO
PIONEER
A
B
C
D

To PS AND FUNC assy CN701

NOTE FOR PCB DIAGRAMS:

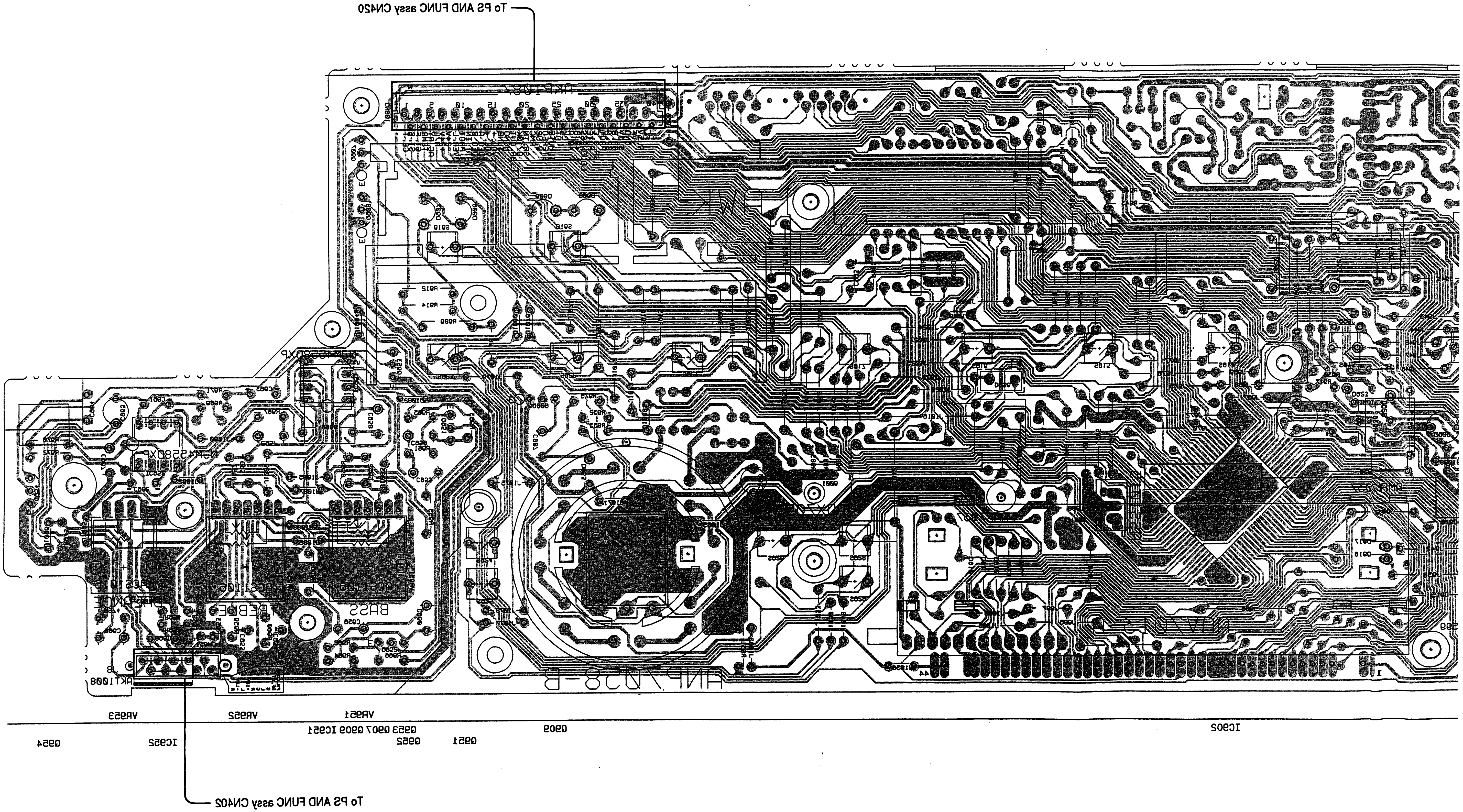
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Diode
		Capacitor (Polarized)

3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊂= shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

- This diagram is viewed from the mounted parts side.

*1: VSX-5045/KUXJ, KCXJ ONLY

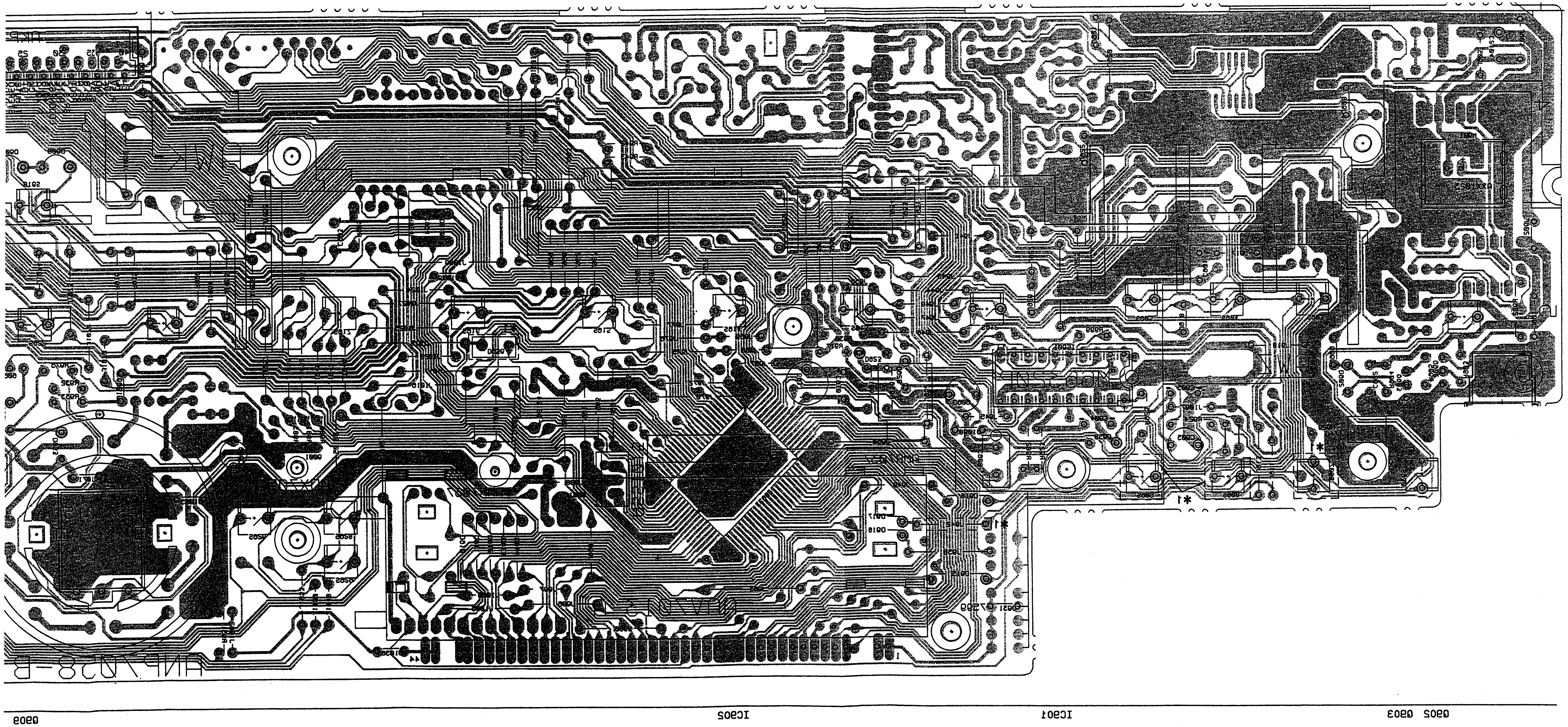

To PS AND FUNC assy CN420
A
B
C
D
AKP1067
ANP7058-B
NJM4558DXP
BASS
TREBLE
AKT1008
VR953
VR952
VR951
IC952
Q954
Q953 Q957 Q909 IC951
Q952
Q951
Q909
IC902
To PS AND FUNC assy CN402

- This diagram is viewed from the foil side.

4.3 FL AND UCOM ASSY

*1: VSX-504S/KUXJ, KCXJ ONLY

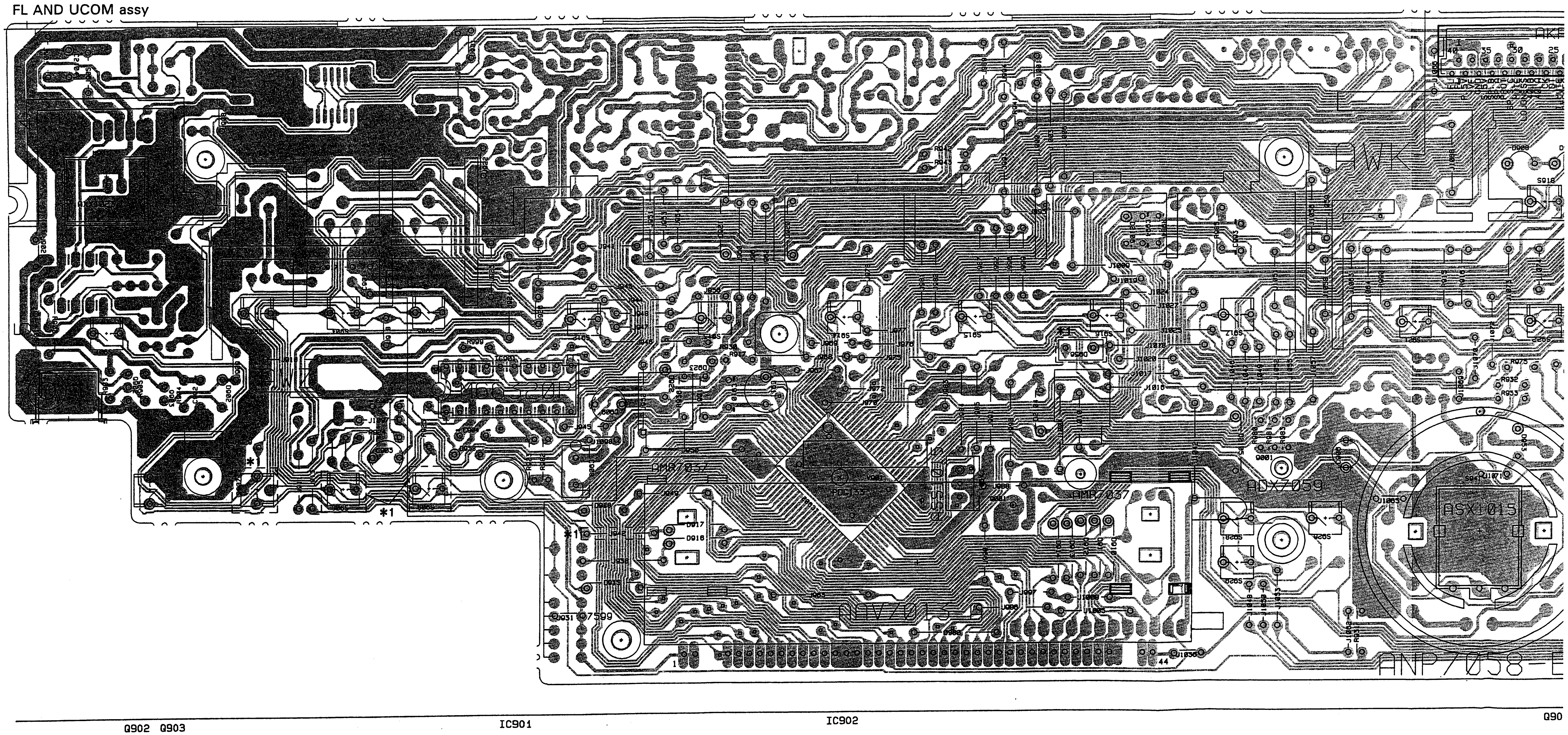
FL AND UCOM assy


Q909
IC902
IC901
Q902 Q903
*1
ANP7038-B

- This diagram is viewed from the foil side.

4.3 FL AND UCOM ASSY

*1: VSX- 504S/KUXJ, KCXJ ONLY

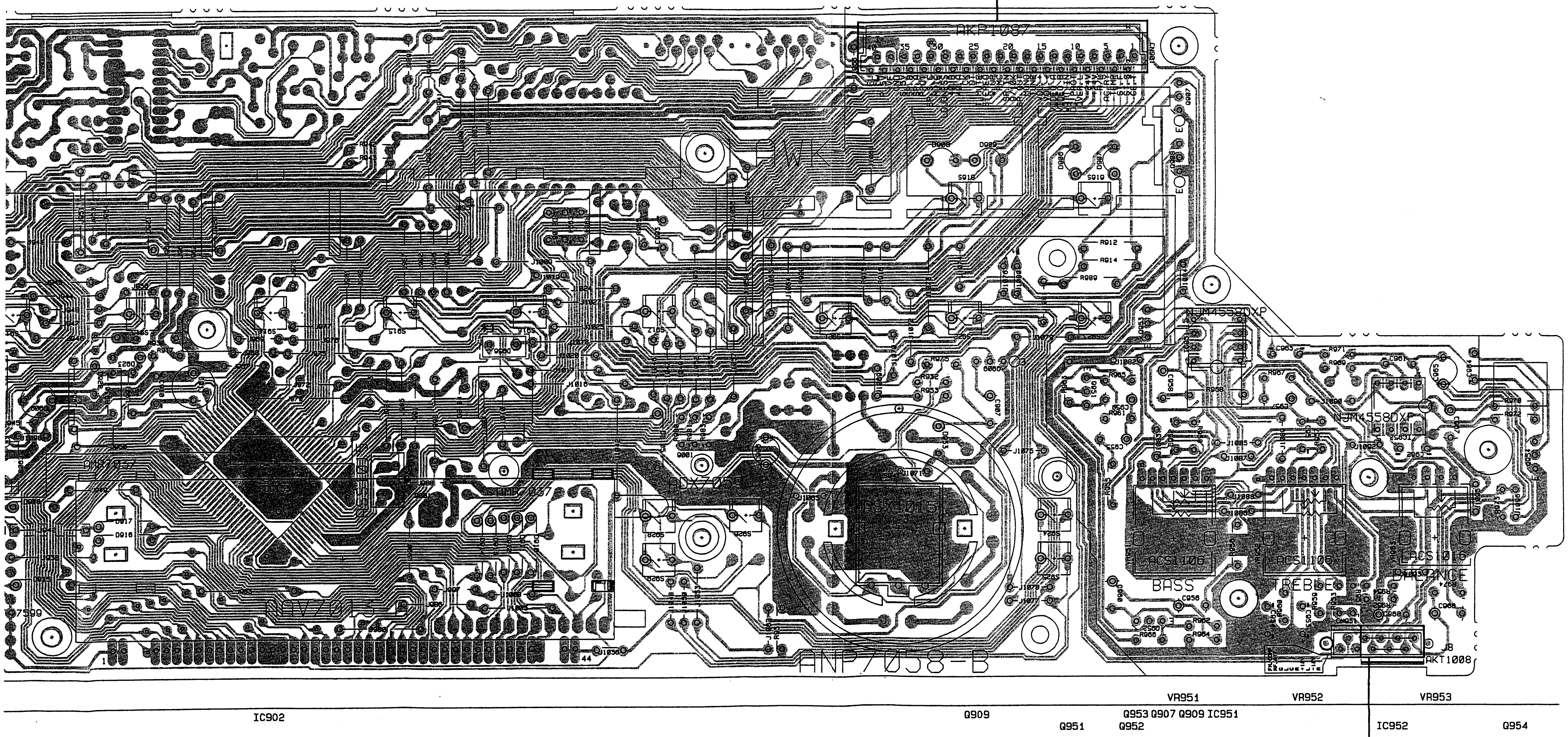

FL AND UCOM assy
*1
ADX7059
ASX1015
ANP7058-E
Q902 Q903
IC901
IC902
Q90
3
4
5
6
7
A
B
C
D

- This diagram is viewed from the mounted parts side.

A

*1: VSX- 504S/KUXJ, KCXJ ONLY

To PS AND FUNC assy CN420


AKP1087
R912
R914
R989
NJM4558DXP
NJM4558DXP
ACS1106
ACS1106
ACS1016
BASS
TREBLE
BALANCE
AKT1008
J8
ANP7058-B
IC902
Q909
VR951
Q953 Q907 Q909 IC951
Q951
Q952
VR952
VR953
IC952
Q954

B

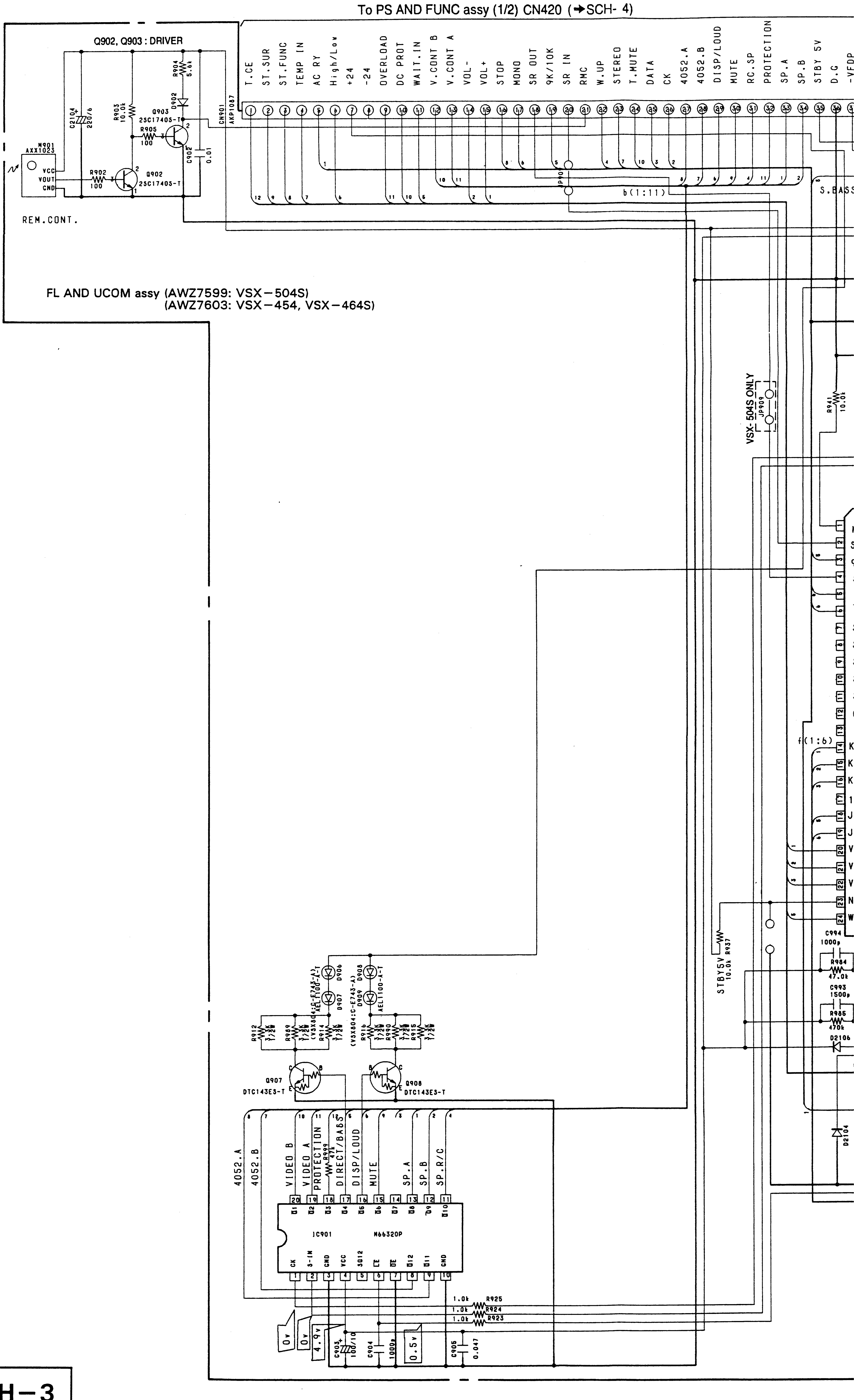
C

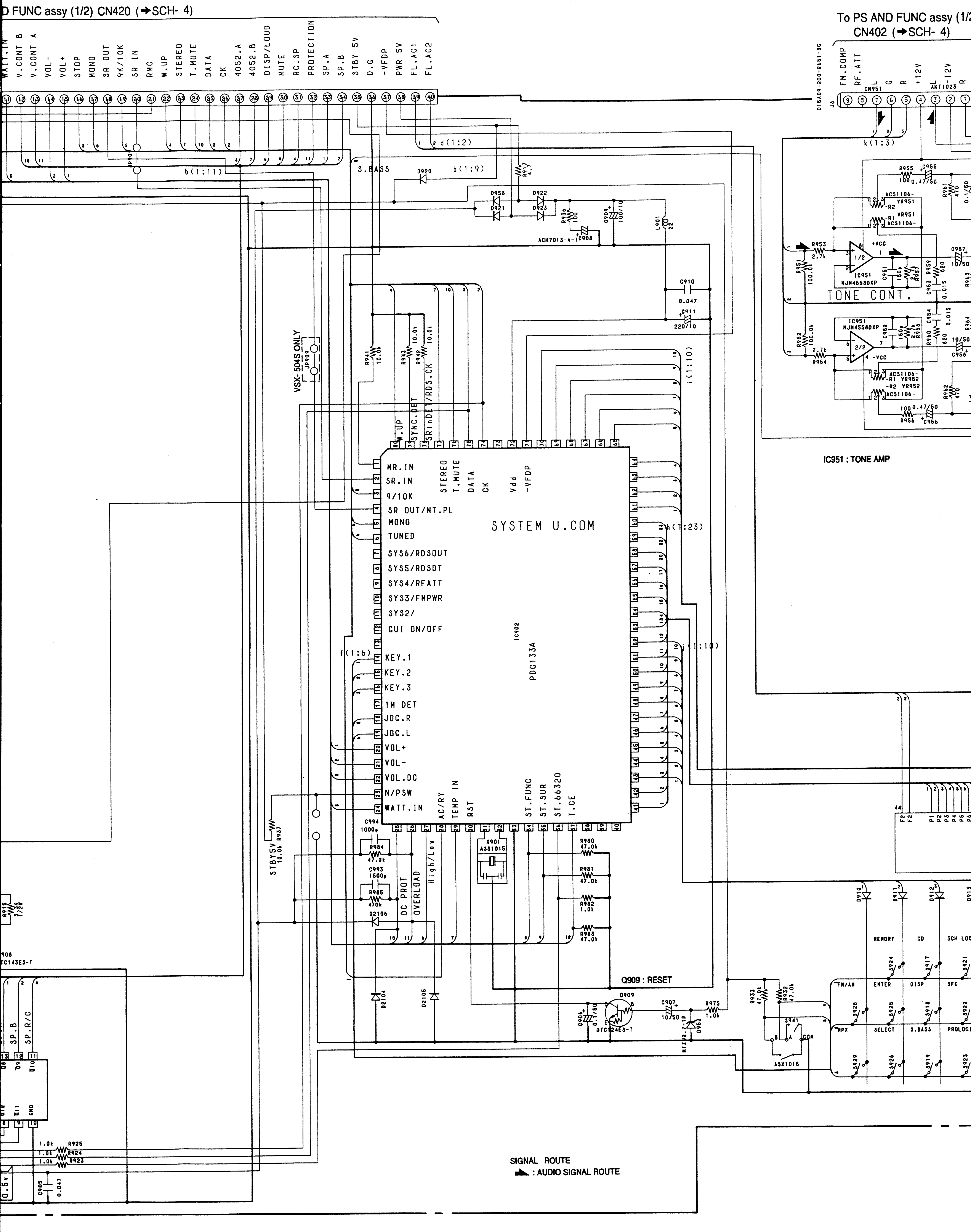
D

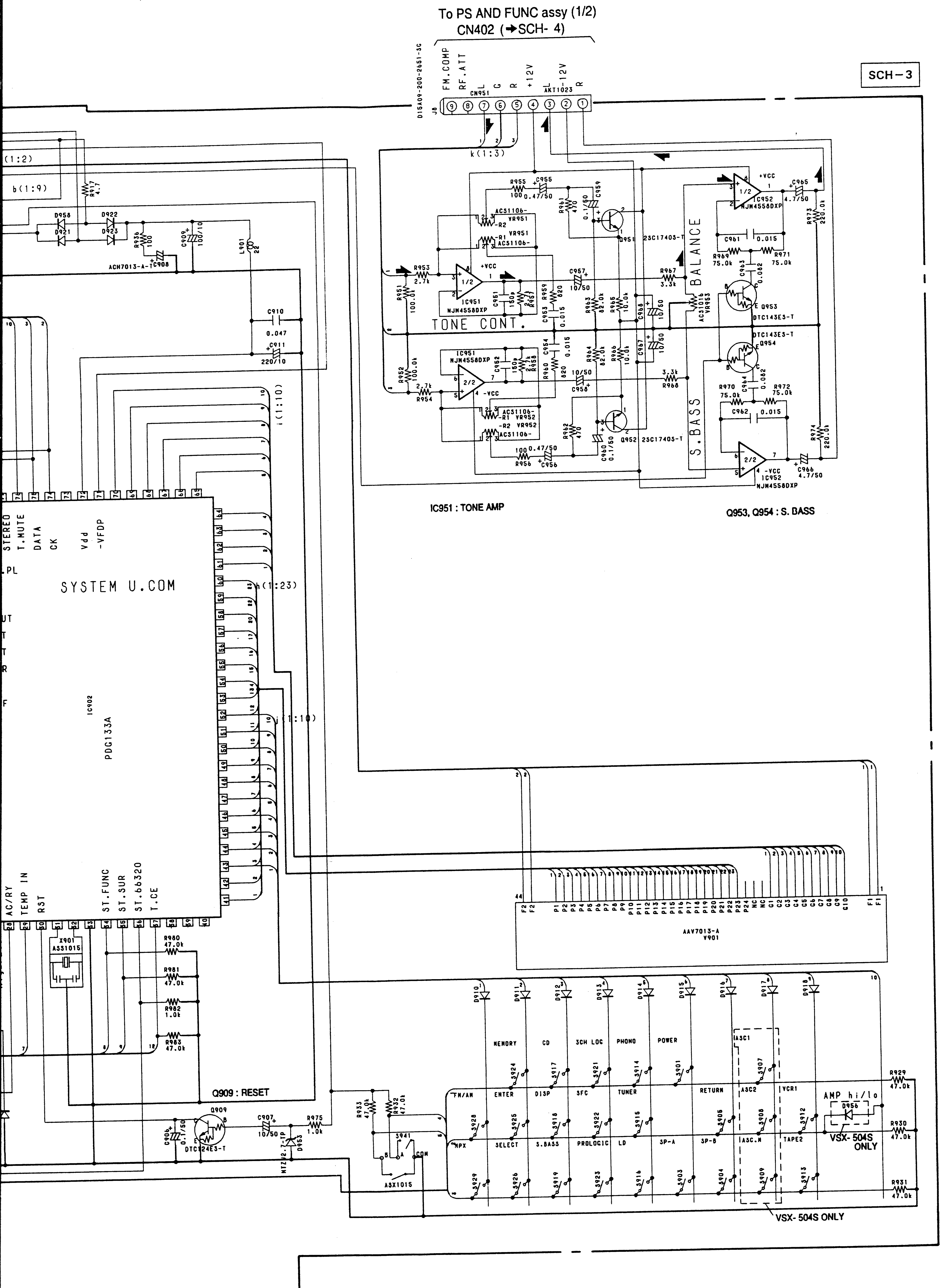
To PS AND FUNC assy CN402

- This diagram is viewed from the mounted parts side.

4.3 FL AND UCOM ASSY


To PS AND FUNC assy (1/2) CN420 (→SCH- 4)
Q902, Q903 : DRIVER
R904 5.6k
D902
R903 10.0k
Q903 2SC1740S-T
R905 100
C2104 220/6
C902 0.01
CN901 AKP1067
M901 AXX1023
VCC
VOUT
GND
R902 100
Q902 2SC1740S-T
REM.CONT.
T.CE
ST.SUR
ST.FUNC
TEMP IN
AC RY
High/Low
+24
-24
OVERLOAD
DC PROT
WAIT.IN
V.CONT B
V.CONT A
VOL-
VOL+
STOP
MONO
SR OUT
9K/10K
SR IN
RMC
W.UP
STEREO
T.MUTE
DATA
CK
4052.A
4052.B
DISP/LOUD
MUTE
RC.SP
PROTECTION
SP.A
SP.B
STBY 5V
D.G
-VFDP
JP901
b(1:11)
S.BASS
FL AND UCOM assy (AWZ7599: VSX−504S)
(AWZ7603: VSX−454, VSX−464S)
VSX-504S ONLY
JP909
R941 10.0k
f(1:6)
STBY5V
R937 10.0k
C994 1000p
R984 47.0k
C993 1500p
R985 470k
D2106
D2104
D906
D907 (VSX604:C-E743-A)
AEL1100-A-T
D908
D909 (VSX604:C-E743-A)
AEL1100-A-T
R912
R989
R914
R916
R990
R915
Q907 DTC143ES-T
Q908 DTC143ES-T
4052.A
4052.B
VIDEO B
VIDEO A
PROTECTION
R999 47k
DIRECT/BASS
DISP/LOUD
MUTE
SP.A
SP.B
SP.R/C
IC901 M66320P
CK
S-IN
GND
VCC
SO12
CE
OE
O12
O11
GND
R925 1.0k
R924 1.0k
R923 1.0k
0v
0v
4.9v
0.5v
C903 100/10
C904 1000p
C905 0.047

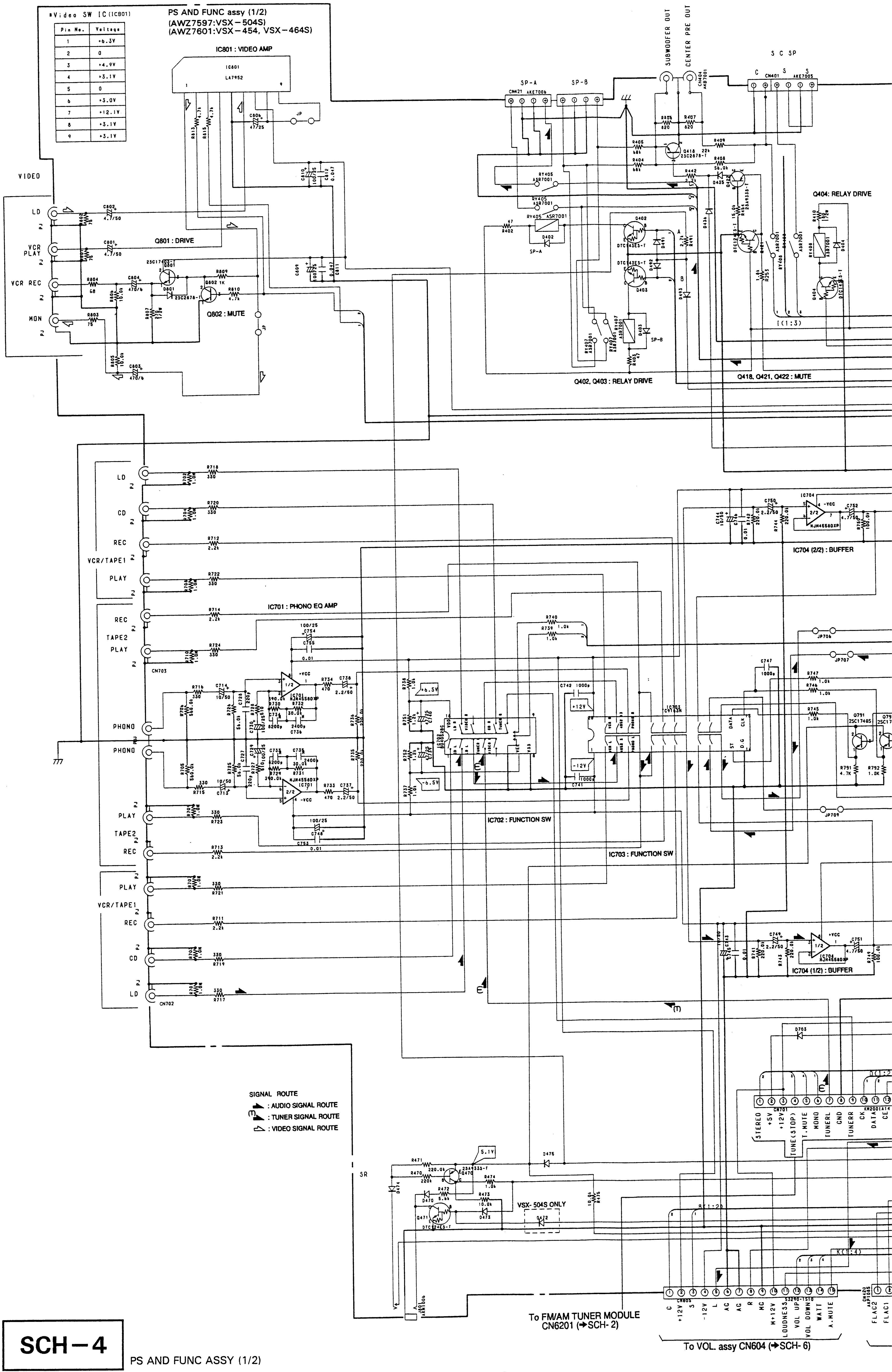

D FUNC assy (1/2) CN420 (➔SCH- 4)
WATT.IN
V.CONT B
V.CONT A
VOL-
VOL+
STOP
MONO
SR OUT
9K/10K
SR IN
RMC
W.UP
STEREO
T.MUTE
DATA
CK
4052.A
4052.B
DISP/LOUD
MUTE
RC.SP
PROTECTION
SP.A
SP.B
STBY 5V
D.G
-VFDP
PWR 5V
FL.AC1
FL.AC2
To PS AND FUNC assy (1/2) CN402 (➔SCH- 4)
D15A09-200-2651-SG
J8
FM.COMP
RF.ATT
L
G
R
+12V
L
-12V
R
CN951
AKT1023
k(1:3)
d(1:2)
b(1:11)
b(1:9)
S.BASS
D920
R917 4.7
D958
D921
D922
D923
R936 100
C909 100/10
L901 22
ACH7013-A-
C908
C910 0.047
C911 220/10
VSX- 504S ONLY
JP909
JP90
R941 10.0k
R943 10.0k
R942 10.0k
i(1:10)
W.UP
SYNC.DET
SRinDET/RDS.CK
MR.IN
SR.IN
9/10K
SR OUT/NT.PL
MONO
TUNED
SYS6/RDSOUT
SYS5/RDSDT
SYS4/RFATT
SYS3/FMPWR
SYS2/
GUI ON/OFF
KEY.1
KEY.2
KEY.3
1M DET
JOG.R
JOG.L
VOL+
VOL-
VOL.DC
N/PSW
WATT.IN
STEREO
T.MUTE
DATA
CK
Vdd
-VFDP
SYSTEM U.COM
IC902
PDC133A
h(1:23)
j(1:10)
f(1:6)
AC/RY
TEMP IN
RST
ST.FUNC
ST.SUR
ST.66320
T.CE
C994 1000p
R984 47.0k
C993 1500p
R985 470k
D2106
DC PROT
OVERLOAD
High/Low
X901 ASS1015
R980 47.0k
R981 47.0k
R982 1.0k
R983 47.0k
STBY5V
R937 10.0k
R915
Q908 DTC143E3-T
SP.B
SP.R/C
GND
1.0k R925
1.0k R924
1.0k R923
C905 0.047
D2104
D2105
Q909 : RESET
Q909
C904 0.1/50
DTC124E3-T
C907 10/50
R975 1.0k
MTZJ2.7-TP
D953
R933 47.0k
R932 47.0k
S941
ASX1015
COM
R955 100
C955 0.47/50
ACS1106-
VR951
R961 470
R953 2.7k
R951 100.0k
IC951
NJM4558DXP
1/2
2/2
+VCC
-VCC
C951 150p
R957
R959 820
C953 0.015
C957 10/50
C954 0.015
C952 150p
R958
R960 820
R952 100.0k
R954 2.7k
VR952
R962 470
R956 100
C956 0.47/50
C958 10/50
TONE CONT.
IC951 : TONE AMP
D910
D911
D912
MEMORY
CD
3CH LOGIC
S924
S917
S921
FM/AM
ENTER
DISP
SFC
S928
S925
S918
S922
MPX
SELECT
S.BASS
PROLOGIC
S929
S926
S919
S923
SIGNAL ROUTE
➡ : AUDIO SIGNAL ROUTE


To PS AND FUNC assy (1/2)
CN402 (➔SCH- 4)
SCH−3
FM.COMP
RF.ATT
L
G
R
+12V
L
-12V
R
CN951
AKT1023
D15A09-200-2651-SG
J8
k(1:3)
(1:2)
b(1:9)
R917 4.7
D958
D922
D921
D923
R936 100
C909 100/10
L901 22
ACH7013-A-T
C908
C910 0.047
C911 220/10
R955 100
C955 0.47/50
C959 0.1/50
R961 470
Q951
2SC1740S-T
AC51106-R2
VR951
VR951-R1
AC51106-
R953 2.7k
R951 100.0k
IC951 NJM4558DXP
1/2
C951 150p
R957 2.7k
R959 820
C957 10/50
R967 3.3k
TONE CONT.
C953 0.015
R963 82.0k
R965 10.0k
C966 10/50
AC31016 VR963
BALANCE
IC952 NJM4558DXP
C965 4.7/50
R973 220.0k
C961
0.015
R969 75.0k
R971 75.0k
C963 0.082
Q953
DTC143ES-T
DTC143ES-T
Q954
C954 0.015
R964 82.0k
R966 10.0k
C967 10/50
R952 100.0k
2/2
R954 2.7k
C962 150p
R958 2.7k
R960 820
C958 10/50
R968 3.3k
AC51106-R1 VR952
-R2 VR952
AC51106-
R962 470
Q952 2SC1740S-T
C960 0.1/50
R956 100
C956 0.47/50
S.BASS
R970 75.0k
R972 75.0k
C964 0.082
C962 0.015
R974 220.0k
C966 4.7/50
+VCC
-VCC
IC951 : TONE AMP
Q953, Q954 : S. BASS
i(1:10)
STEREO
T.MUTE
DATA
CK
Vdd
-VFDP
PL
SYSTEM U.COM
h(1:23)
IC902
PDG133A
j(1:10)
AC/RY
TEMP IN
RST
ST.FUNC
ST.SUR
ST.66320
T.CE
X901 AS31015
R980 47.0k
R981 47.0k
R982 1.0k
R983 47.0k
Q909 : RESET
Q909
C906 0.1/50
DTC124ES-T
C907 10/50
R975 1.0k
MTZ12.7-1P
D953
R933 47.0k
R932 47.0k
S941
ASX1015
COM
F2 F2 P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 P19 P20 P21 P22 P23 P24 NC NC G1 G2 G3 G4 G5 G6 G7 G8 G9 G10 F1 F1
AAV7013-A
V901
D910 D911 D912 D913 D914 D915 D916 D917 D918
MEMORY
CD
3CH LOC
PHONO
POWER
ASC1
S924 S917 S921 S914 S901 S907
FM/AM
ENTER
DISP
SFC
TUNER
RETURN
ASC2
VCR1
AMP hi/lo
D956
R929 47.0k
S928 S925 S918 S922 S915 S906 S908 S912
MPX
SELECT
S.BASS
PROLOGIC
LD
SP-A
SP-B
ASC.M
TAPE2
VSX- 504S ONLY
R930 47.0k
S929 S926 S919 S923 S916 S903 S904 S909 S913
R931 47.0k
VSX- 504S ONLY

SIGNAL ROUTE

▶ : AUDIO SIGNAL ROUTE

4.4 PS AND FUNC ASSY



*Video SW IC (IC801)

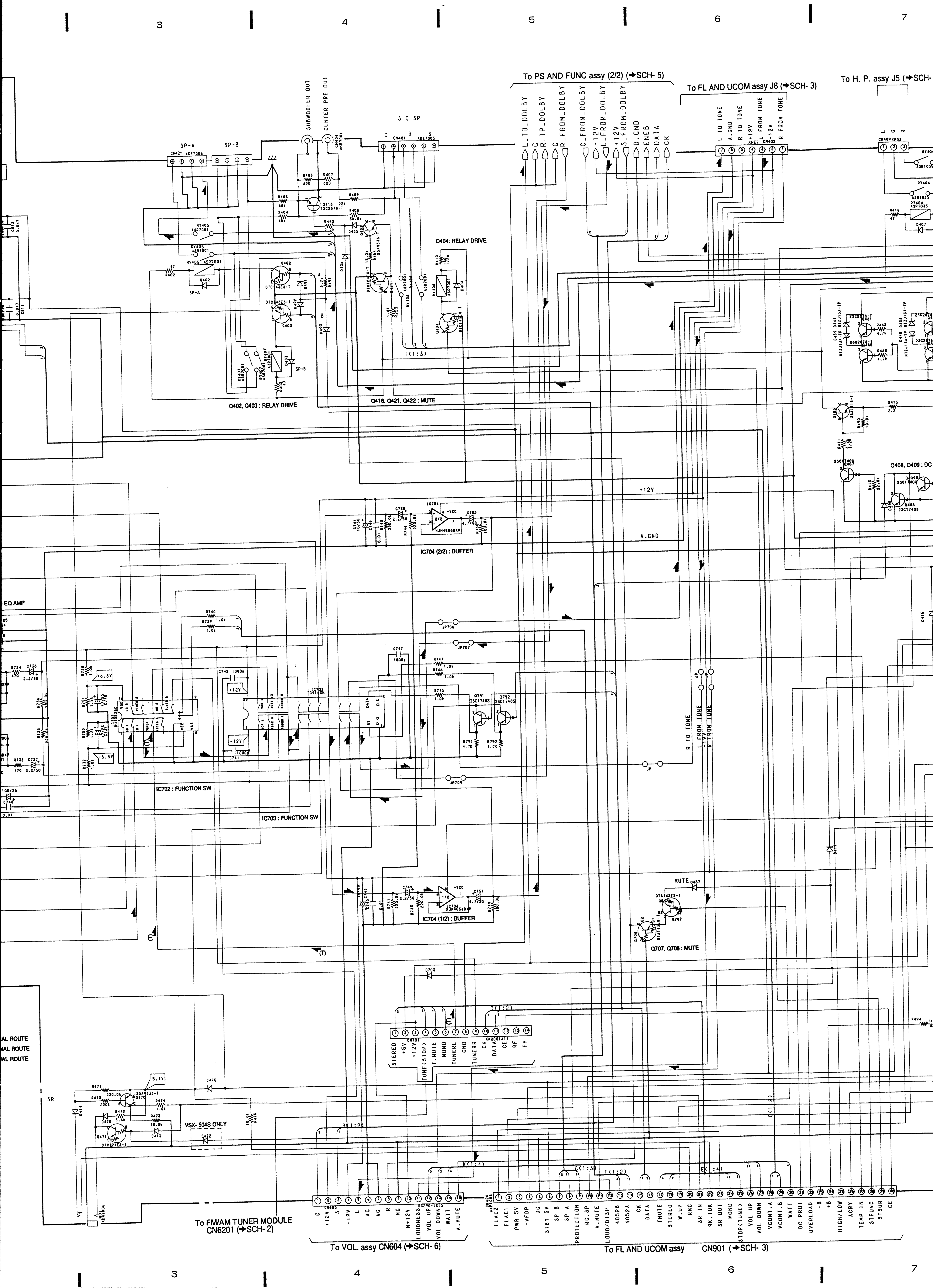
Pin No.	Voltage
1	+6.3V
2	0
3	+4.9V
4	+3.1V
5	0
6	+3.0V
7	+12.1V
8	+3.1V
9	+3.1V

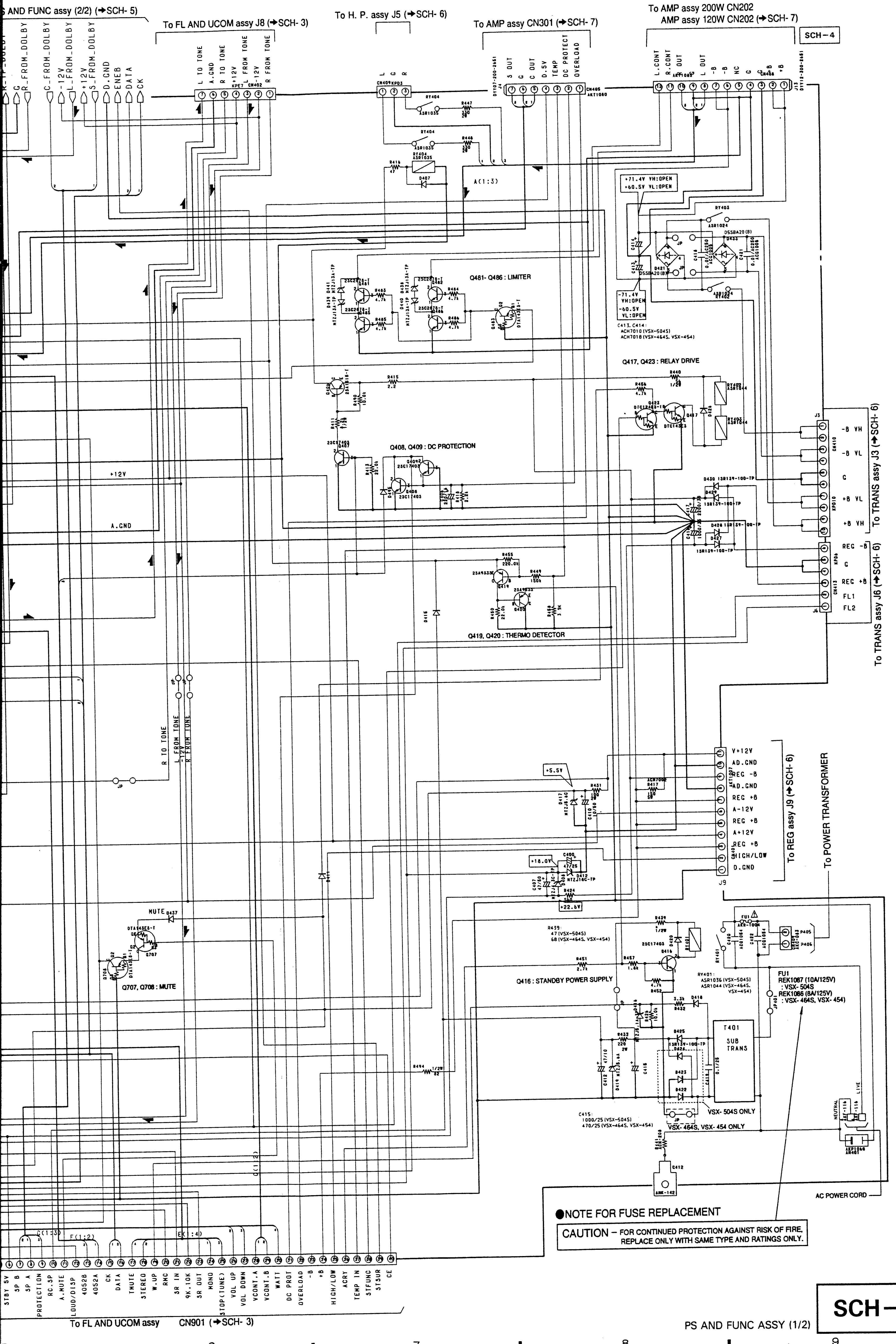
PS AND FUNC assy (1/2)
(AWZ7597:VSX−504S)
(AWZ7601:VSX−454, VSX−464S)

IC801 : VIDEO AMP
IC801
LA7952
VIDEO
LD
VCR PLAY
VCR REC
MON
Q801 : DRIVE
Q802 : MUTE
SUBWOOFER OUT
CENTER PRE OUT
SP-A
SP-B
S C SP
Q404: RELAY DRIVE
Q402, Q403 : RELAY DRIVE
Q418, Q421, Q422 : MUTE
LD
CD
REC
VCR/TAPE1
PLAY
REC
TAPE2
PLAY
CN703
PHONO
PHONO
IC701 : PHONO EQ AMP
IC702 : FUNCTION SW
IC703 : FUNCTION SW
IC704 (2/2) : BUFFER
IC704 (1/2) : BUFFER
PLAY
TAPE2
REC
PLAY
VCR/TAPE1
REC
CD
LD
CN702
JP706
JP707
JP709
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
: TUNER SIGNAL ROUTE
: VIDEO SIGNAL ROUTE
VSX- 504S ONLY
SR
STEREO
+5V
+12V
TUNE(STOP)
T.MUTE
MONO
TUNERL
GND
TUNERR
CK
DATA
CN701
+12V
S
-12V
L
AG
R
MG
M+12V
LOUDNESS
VOL UP
VOL DOWN
WATT
A.MUTE
To FM/AM TUNER MODULE CN6201 (➔SCH- 2)
To VOL. assy CN604 (➔SCH- 6)
A
B
C
D
E
F
1
2
3
4

SCH−4

PS AND FUNC ASSY (1/2)


3
4
5
6
7
To PS AND FUNC assy (2/2) (➔SCH- 5)
To FL AND UCOM assy J8 (➔SCH- 3)
To H. P. assy J5 (➔SCH-
SUBWOOFER OUT
CENTER PRE OUT
S C SP
SP-A
SP-B
CN421 AKE7006
CN401 AKE7005
CN402
CN409
L_TO_DOLBY
G
R_TP_DOLBY
G
R_FROM_DOLBY
C_FROM_DOLBY
-12V
L_FROM_DOLBY
+12V
S_FROM_DOLBY
D.GND
ENEB
DATA
CK
L TO TONE
A.GND
R TO TONE
+12V
L FROM TONE
-12V
R FROM TONE
L G R
Q404: RELAY DRIVE
Q402, Q403 : RELAY DRIVE
Q418, Q421, Q422 : MUTE
Q408, Q409 : DC
RY405 ASR7001
RY406 ASR7001
RY407 ASR7001
RY404 ASR1035
DTC143ES-T
2SC2878-T
2SA933S-T
2SC1740S
+12V
A.GND
IC704 NJM4558DXP
IC704 (2/2) : BUFFER
IC704 (1/2) : BUFFER
EQ AMP
IC702 : FUNCTION SW
IC703 : FUNCTION SW
JP706
JP707
JP709
JP
Q791 2SC1740S
Q792 2SC1740S
R TO TONE
L FROM TONE
R FROM TONE
MUTE D437
Q707, Q708 : MUTE
DTA143ES-T
D703
CN701 KM200TA14
STEREO
+5V
+12V
TUNE(STOP)
T.MUTE
MONO
TUNERL
GND
TUNERR
CK
DATA
CE
RF
FM
AL ROUTE
AL ROUTE
AL ROUTE
SR
D475
5.1V
Q470
Q471
DTC143ES-T
2SA933S-T
VSX- 504S ONLY
D412
CN605
C
+12V
-12V
L
AC
AG
R
RC
M+12V
LOUDNESS
VOL UP
VOL DOWN
WATT
A.MUTE
CN420
FLAC2
FLAC1
PWR SV
-VFDP
DG
STBY SV
SP B
SP A
PROTECTION
RC.SP
A.MUTE
LOUD/DISP
4052B
4052A
CK
DATA
TMUTE
STEREO
W.UP
RMC
SR IN
9K.10K
SR OUT
MONO
STOP(TUNE)
VOL UP
VOL DOWN
VCONT.A
VCONT.B
WATT
DC PROT
OVERLOAD
-B
+B
HIGH/LOW
ACRY
TEMP IN
STFUNC
STSUR
CE
To FM/AM TUNER MODULE CN6201 (➔SCH- 2)
To VOL. assy CN604 (➔SCH- 6)
To FL AND UCOM assy CN901 (➔SCH- 3)


AND FUNC assy (2/2) (→SCH- 5)
To FL AND UCOM assy J8 (→SCH- 3)
To H. P. assy J5 (→SCH- 6)
To AMP assy CN301 (→SCH- 7)
To AMP assy 200W CN202
AMP assy 120W CN202 (→SCH- 7)
R_FROM.DOLBY
C_FROM.DOLBY
L_FROM.DOLBY
S_FROM.DOLBY
-12V
+12V
D.GND
ENEB
DATA
CK
L TO TONE
A.GND
R TO TONE
+12V
L FROM TONE
-12V
R FROM TONE
KPE7 CN402
CN409 KPD3
L
C
R
RY404
ASR1035
R447
R448
R416
D407
A(1:3)
S OUT
G
C OUT
D.5V
TEMP
DC PROTECT
OVERLOAD
CN405
AKT1080
L.CONT
R.CONT
C OUT
L OUT
-B
-B
NC
G
G
+B
+B
CN408
+71.4V VH:OPEN
+60.5V VL:OPEN
RY403
ASR1024
D55BA20(B)
D433
D421
C413
C414
C418
C421
JP
RY402
-71.4V VH:OPEN
-60.5V VL:OPEN
C413, C414:
ACH7010 (VSX-504S)
ACH7018 (VSX-464S, VSX-454)
Q481- Q486 : LIMITER
2SC2878-T
Q481
Q482
Q483
Q484
Q485
Q486
R483 4.7k
R484 4.7k
R485 4.7k
R486 4.7k
Q403
DTA143ES-T
Q417, Q423 : RELAY DRIVE
R440
R456 4.7k
Q423 DTC124ES-T
Q417 DTC143ES
RY402 ASR1044
RY403 ASR1044
R415 2.2
Q402 2SA1145-T
R410
R411
2SC17403 Q407
Q408, Q409 : DC PROTECTION
Q409 2SC17403
Q408 2SC17403
R412
+12V
A.GND
D430 1SR139-100-TP
D429
D426 1SR139-100-TP
D427
C417
C418
J3
CN410
KPD10
-B VH
-B VL
G
+B VL
+B VH
To TRANS assy J3 (→SCH- 6)
REG -B
G
REG +B
FL1
FL2
KPD6
CN413
J6
To TRANS assy J6 (→SCH- 6)
R455 220.0k
R449 150k
2SA933S
Q419
2SA933S
Q420
R460
R458 3.9k
D416
Q419, Q420 : THERMO DETECTOR
JP
R TO TONE
L FROM TONE
R FROM TONE
JP
+5.5V
R431
D417
C410
ACH7006
R417
V+12V
AD.GND
REG -B
AD.GND
REG +B
A-12V
REG +B
A+12V
REG +B
HIGH/LOW
D.GND
J9
To REG assy J9 (→SCH- 6)
To POWER TRANSFORMER
+18.0V
C400 47/25
D412 MTZJ18C-TP
C402
R424
+22.6V
D411
MUTE D437
DTA143ES-T
Q707
Q708
Q707, Q708 : MUTE
R439
R439 47 (VSX-504S)
68 (VSX-464S, VSX-454)
2SC17403
Q416
D420
RY401
R451 2.7k
R457 1.8k
R452 4.7k
Q416 : STANDBY POWER SUPPLY
RY401:
ASR1036 (VSX-504S)
ASR1044 (VSX-464S, VSX-454)
FU1
REK1087 (10A/125V)
: VSX- 504S
REK1086 (8A/125V)
: VSX- 464S, VSX- 454)
C400
C401
ACG1064
P405
P406
JP401
R432 3.3k
D418
D419
R433
C412
C414
D425 1SR139-100-TP
D424
D423
D422
C415
T401
SUB TRANS
VSX- 504S ONLY
VSX- 464S, VSX- 454 ONLY
C415:
1000/25 (VSX-504S)
470/25 (VSX-464S, VSX-454)
R494 1/2W 82
NEUTRAL
LIVE
AKP1048
AR401
ANK-142
AC POWER CORD
C(1:3)
F(1:2)
E(1:4)
G(1:2)
STBY 5V
SP B
SP A
PROTECTION
RC.SP
A.MUTE
LOUD/DISP
4052B
4052A
CK
DATA
TMUTE
STEREO
W.UP
RMC
SR IN
9K,10K
SR OUT
MONO
STOP(TUNE)
VOL UP
VOL DOWN
VCONT.A
VCONT.B
WATT
DC PROT
OVERLOAD
-B
+B
HIGH/LOW
ACRY
TEMP IN
STFUNC
STSUR
CE
To FL AND UCOM assy CN901 (→SCH- 3)

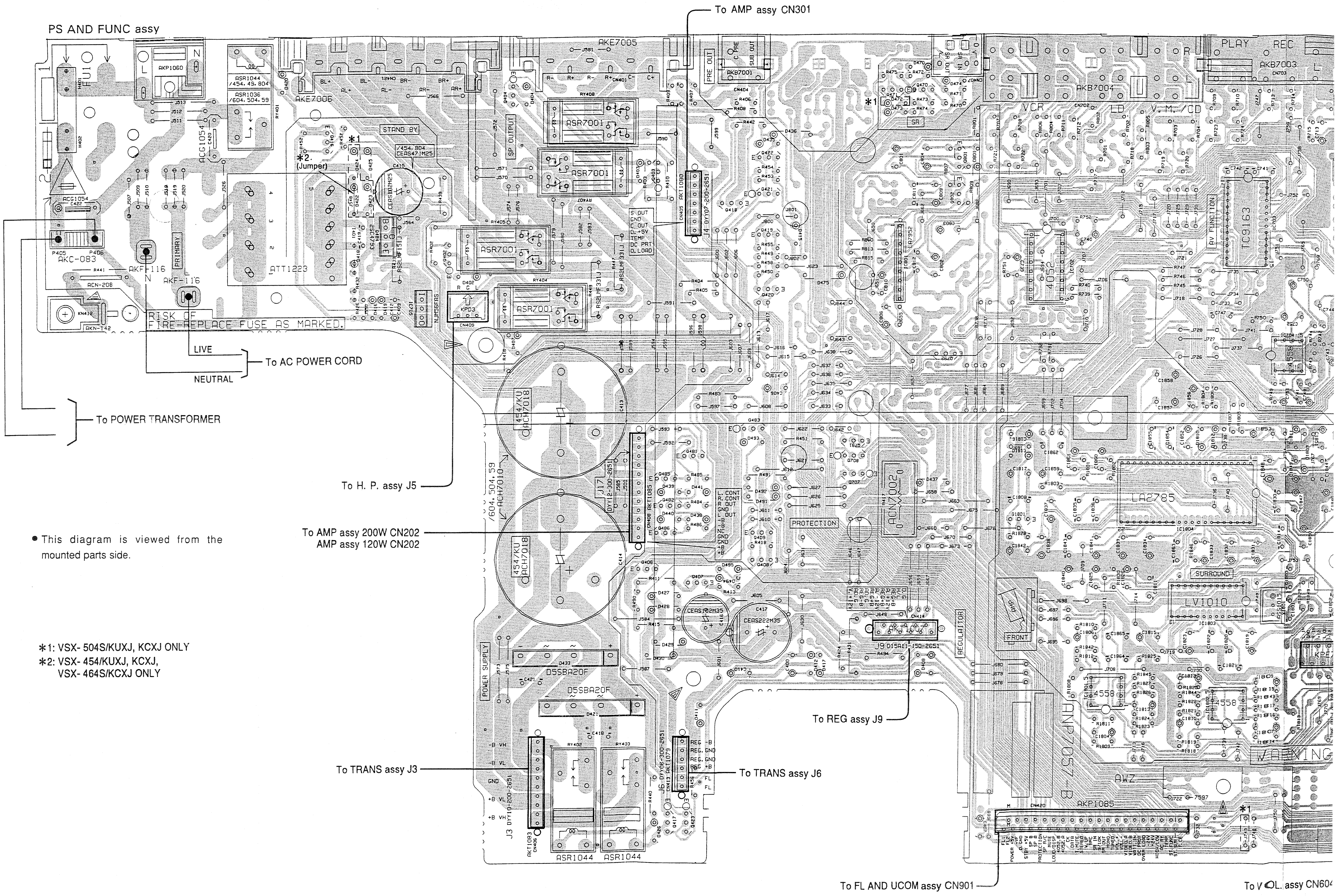
●NOTE FOR FUSE REPLACEMENT

CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

SCH–4

PS AND FUNC ASSY (1/2)

PS AND FUNC assy


1
2
3
4
5
6
A
B
C
D
AKP1060
ASR1044
/454.4S.804
ASR1036
/604.504.59
AKE7006
AKE7005
ACG1054
AKC-083
AKF-116
PRIMARY
ATT1223
ACN-208
AKN-142
STAND BY
CEAS102M25
/454.804
CEAS471M25
RISK OF
FIRE-REPLACE FUSE AS MARKED.
ASR7001
SP OUTPUT
KPD3
NJM56FAS
454/KU
ACH7018
/604.504.59
ACH7010
AKB7001
PRE OUT
SUB OUT
AKB7004
AKB7003
PLAY
REC
VCR
LD
V
M
CD
SR
TC9163
AV FUNCTION
4052
PROTECTION
ACX002
REGULATOR
FRONT
LA2785
SURROUND
LV1010
4558
ANP7057-B
AWZ
AKP1085
CN420
POWER SUPPLY
D5SBA20F
CEAS102M35
CEAS222M35
ASR1044
AKT1083
AKT1090
AKT1085
AKT1079
AKT1072
J3
J4
J6
J9
J17
WARNING
L CONT
C CONT
OUT
GND
S OUT
+5V
TEMP
DC PRT
O.LOAD
REG -B
REG. GND
REG +B
FL
-B VH
-B VL
+B VL
+B VH

To AMP assy CN301

LIVE

NEUTRAL

To AC POWER CORD

To POWER TRANSFORMER

To H. P. assy J5

To AMP assy 200W CN202
AMP assy 120W CN202

To TRANS assy J3

To TRANS assy J6

To REG assy J9

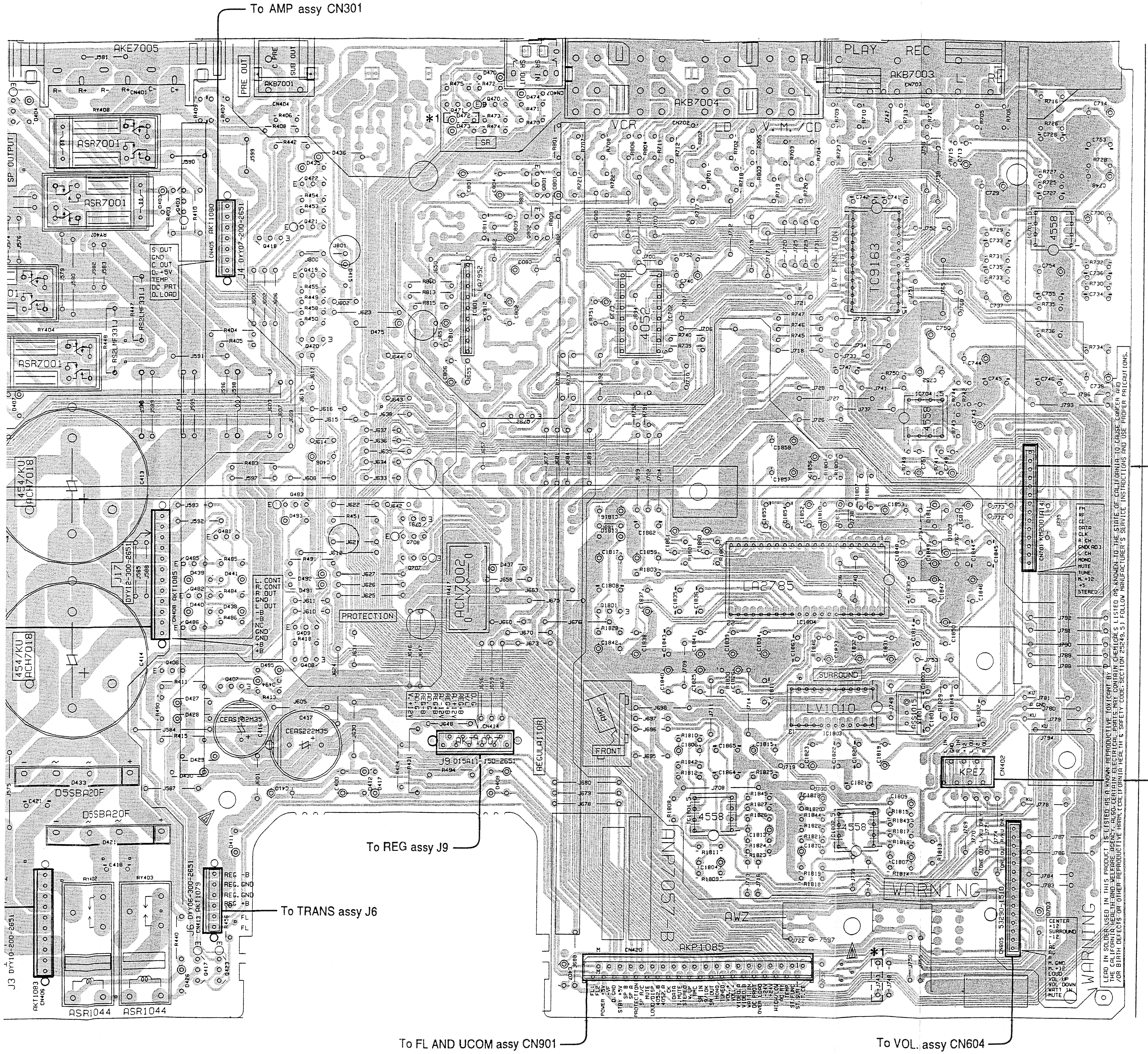
To FL AND UCOM assy CN901

To VOL. assy CN604

- This diagram is viewed from the mounted parts side.

*1: VSX- 504S/KUXJ, KCXJ ONLY
*2: VSX- 454/KUXJ, KCXJ,
VSX- 464S/KCXJ ONLY

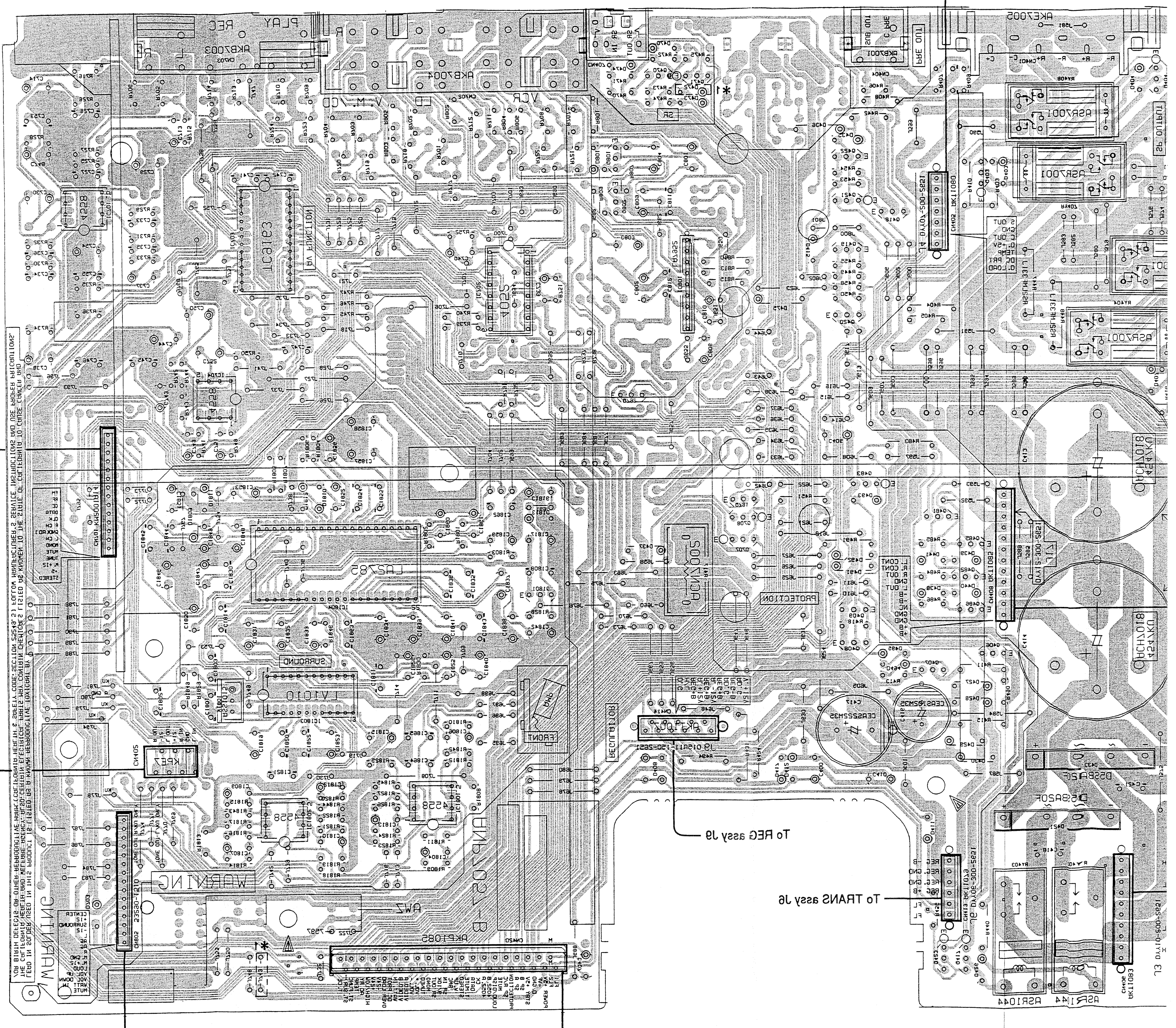
PCB-3

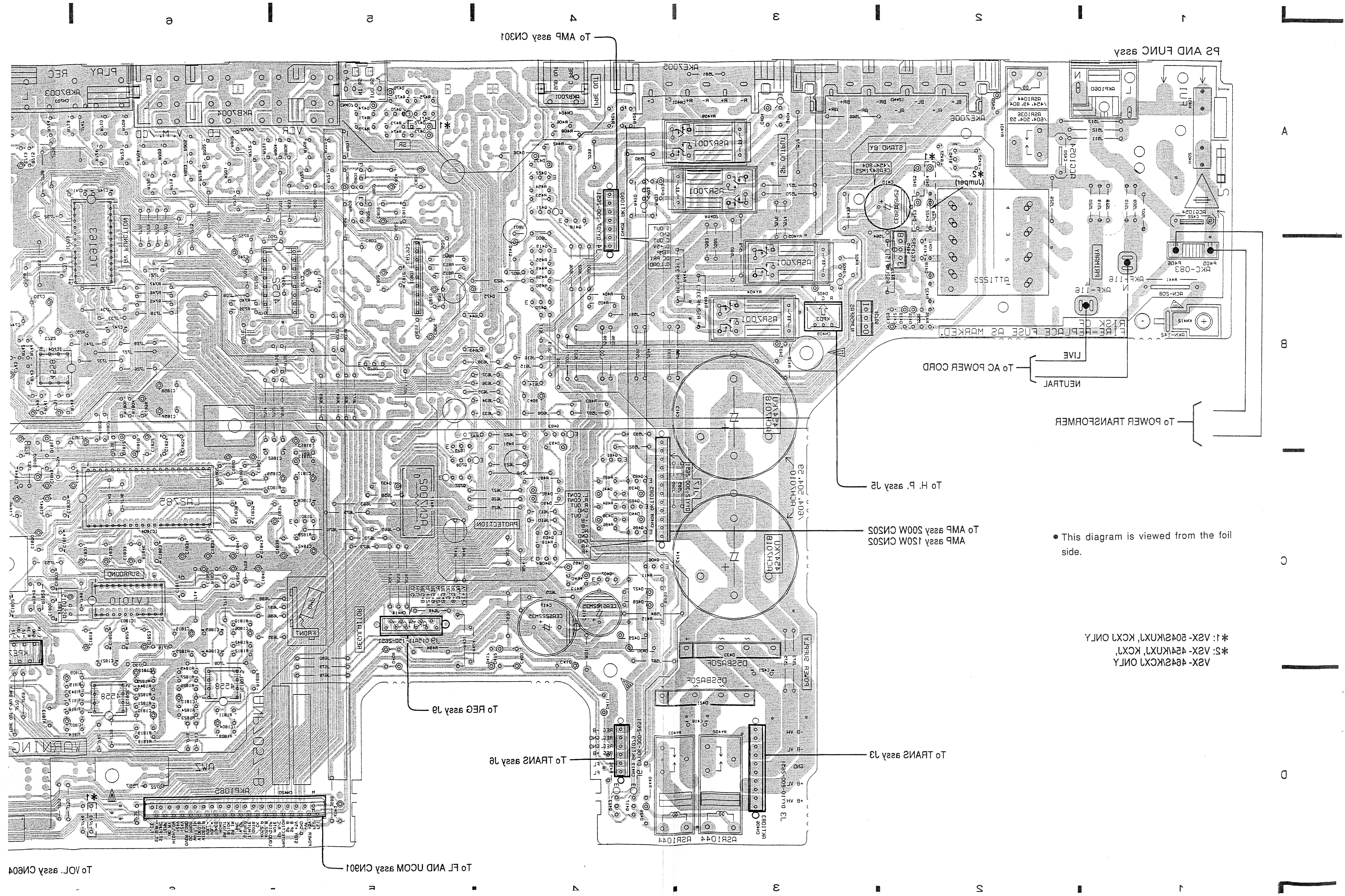

To AMP assy CN301
AKE7005
ASR7001
AKB7001
PRE OUT
SUB OUT
SR
AKB7004
VCR
LD
V.M./CD
PLAY
REC
AKB7003
IC9163
DV FUNCTION
4052
4558
LA2785
LV1010
SURROUND
ACN7002
PROTECTION
REGULATOR
FRONT
ANP7057-B
AWZ
WARNING
AKP1085
KPE7
ACH7018
454/KU
D5SBA20F
ASR1044
CEAS102M35
CEAS222M35
REG -B
REG GND
REG GND
REG +B
To FM/AM TUNER MODULE CN6201
To FL AND UCOM assy J8
To REG assy J9
To TRANS assy J6
To FL AND UCOM assy CN901
To VOL. assy CN604

Q404
Q470
Q471
Q416
Q422
Q801
Q403
Q421
IC701
Q418
Q802
Q419
IC703
Q402
IC801
IC702
Q420
IC704
Q483
Q481
Q708
Q485
Q707
Q482
IC804
Q1801
Q486
Q406
Q409
IC803
IC801
IC802
Q417
Q423
A
B
C
D
8
9

PCB-3

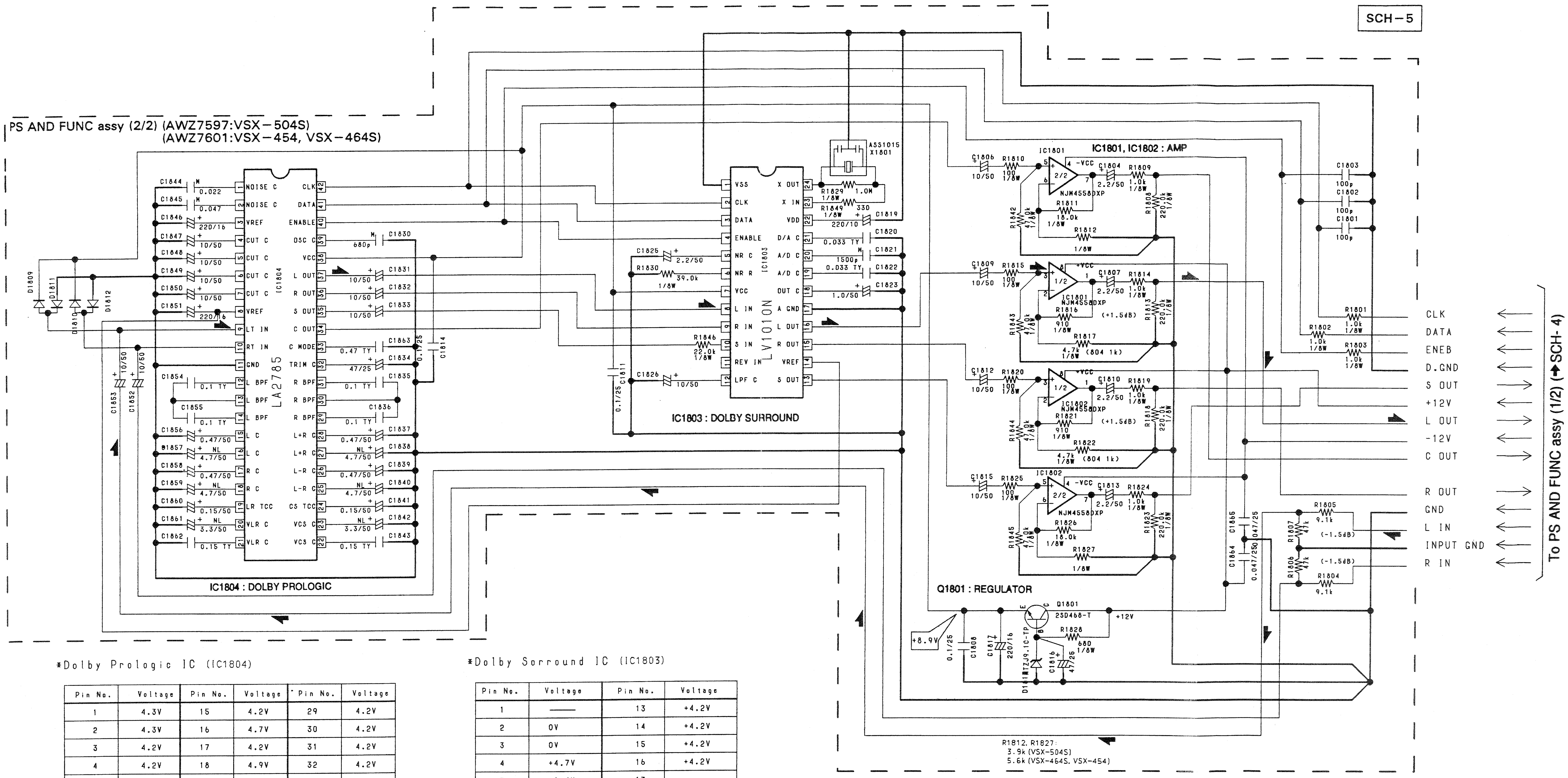
Q470 Q471	Q404
	Q416
Q801	Q422
	Q403
IC701	Q421
Q802	Q418
IC703	Q419
IC801 IC702	Q402
	Q420
IC704	
	Q483
Q708	Q481
Q707	Q485
IC804	Q482
Q1801	
	Q486
	Q406
	Q409
IC803	
IC801 IC802	
	Q417 Q423


To AMP assy CN301
To FM/AM TUNER MODULE CN6201
To FL AND UCOM assy J8
To REG assy J9
To TRANS assy J6
To VOL. assy CN604
To FL AND UCOM assy CN901
A
B
C
D
7
6
5
4
3
9
8
PLAY
REC
VCR
PROTECTION
SURROUND
WARNING
FRONT


6
5
4
3
2
1
A
B
C
D
PS AND FUNC assy
To AMP assy CN301
To AC POWER CORD
LIVE
NEUTRAL
To POWER TRANSFORMER
To H. P. assy J5
To AMP assy 200W CN202
AMP assy 120W CN202
To REG assy J9
To TRANS assy J6
To TRANS assy J3
To FL AND UCOM assy CN901
To VOL. assy CN604
STAND BY
PROTECTION
SURROUND
FRONT
POWER SUPPLY
WARNING
RISK OF FIRE-REPLACE FUSE AS MARKED.
(Jumper)

- This diagram is viewed from the foil side.

*1: VSX-504S/KUXJ, KCXJ ONLY
*2: VSX-454/KUXJ, KCXJ,
VSX-464S/KCXJ ONLY


PS AND FUNC assy (2/2) (AWZ7597:VSX-504S)
(AWZ7601:VSX-454, VSX-464S)
IC1804 : DOLBY PROLOGIC
LA2785
IC1803 : DOLBY SURROUND
LV1010N
IC1801, IC1802 : AMP
NJM4558DXP
Q1801 : REGULATOR
2SD468-T
+12V
+8.9V
ASS1015
X1801
NOISE C
VREF
CUT C
LT IN
RT IN
GND
L BPF
R BPF
L C
R C
LR TCC
VLR C
CLK
DATA
ENABLE
OSC C
VCC
L OUT
R OUT
S OUT
C OUT
C MODE
TRIM C
L+R C
L-R C
CS TCC
VCS C
VSS
X OUT
X IN
VDD
D/A C
A/D C
NR C
NR R
L IN
R IN
S IN
REV IN
LPF C
A GND
VREF
(+1.5dB)
(-1.5dB)
(804 1k)
CLK
DATA
ENEB
D.GND
S OUT
+12V
L OUT
-12V
C OUT
R OUT
GND
L IN
INPUT GND
R IN
To PS AND FUNC assy (1/2) (→SCH- 4)

R1812, R1827:
3.9k (VSX-504S)
5.6k (VSX-464S, VSX-454)

*Dolby Prologic IC (IC1804)

Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage
1	4.3V	15	4.2V	29	4.2V
2	4.3V	16	4.7V	30	4.2V
3	4.2V	17	4.2V	31	4.2V
4	4.2V	18	4.9V	32	4.2V
5	4.2V	19	4.2V	33	4.2V
6	4.2V	20	4.2V	34	4.2V
7	4.2V	21	4.2V	35	4.2V
8	4.2V	22	4.2V	36	4.2V
9	4.2V	23	4.2V	37	4.2V
10	4.2V	24	4.2V	38	8.4V
11	0V	25	4.9V	39	——
12	4.2V	26	4.2V	40	4.7V
13	4.2V	27	4.7V	41	0V
14	4.2V	28	4.2V	42	0V

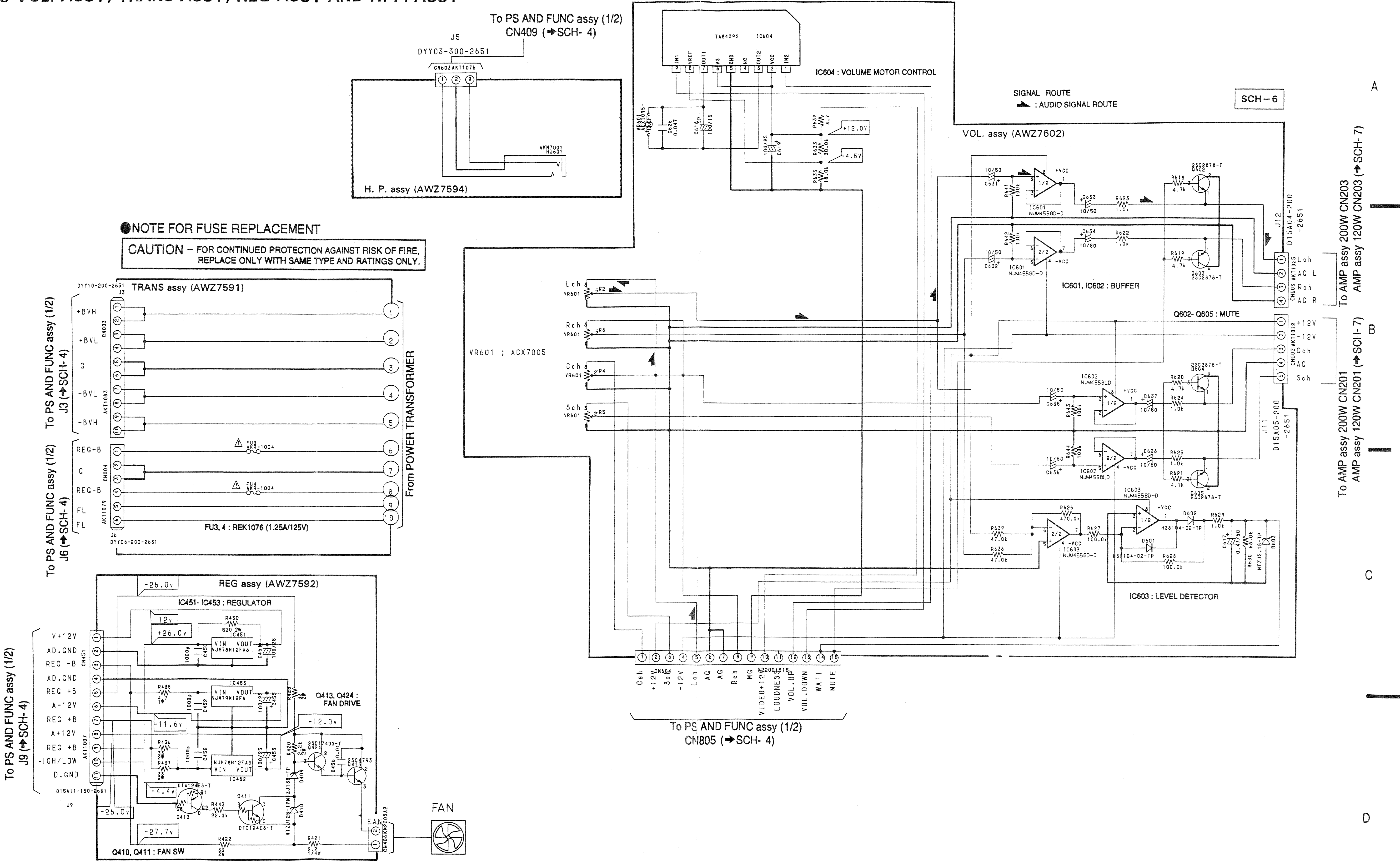
*Dolby Sorround IC (IC1803)

Pin No.	Voltage	Pin No.	Voltage
1	——	13	+4.2V
2	0V	14	+4.2V
3	0V	15	+4.2V
4	+4.7V	16	+4.2V
5	+2.4V	17	——
6	+0.7V	18	+4.2V
7	+8.4V	19	+4.2V
8	+4.2V	20	+4.2V
9	+4.2V	21	+4.2V
10	+4.2V	22	+4.8V
11	+4.2V	23	——
12	+4.2V	24	——

SIGNAL ROUTE

➡ : AUDIO SIGNAL ROUTE

4.5 VOL. ASSY, TRANS ASSY, REG ASSY AND H. P. ASSY

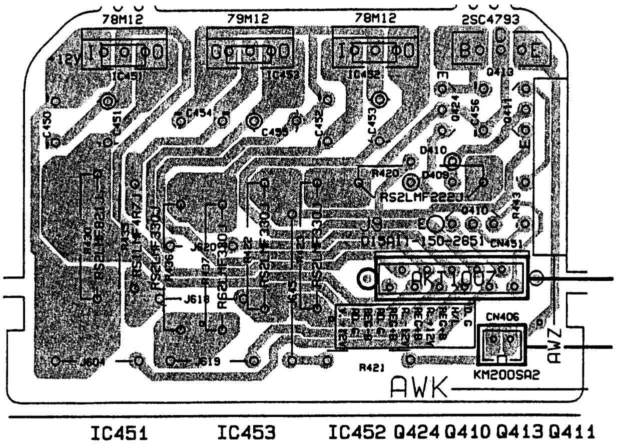

To PS AND FUNC assy (1/2)
CN409 (➔SCH- 4)
J5
DYY03-300-2651
CN603 AKT1076
AKN7001
HJ601
H. P. assy (AWZ7594)
TA8409S
IC604
IN1
VREF
OUT1
V3
GND
NC
OUT2
VCC
IN2
IC604 : VOLUME MOTOR CONTROL
C626 0.047
C618 100/10
C619 100/25
R632 4.7
R633 30.0k
R635 18.0k
+12.0V
+4.5V
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
SCH-6
VOL. assy (AWZ7602)
IC601 NJM4558D-D
IC601, IC602 : BUFFER
IC602 NJM4558LD
IC603 NJM4558D-D
IC603 : LEVEL DETECTOR
Q602- Q605 : MUTE
2SC2878-T
D602 H33104-02-TP
D601 H33104-02-TP
MTZJ5.1B-TP
Lch
Rch
Cch
Sch
VR601
VR601 : ACX7005
J12
D15A04-200-2651
J11
D15A05-200-2651
Lch
AG L
Rch
AG R
+12V
-12V
Cch
AG
Sch
To AMP assy 200W CN203
AMP assy 120W CN203 (➔SCH- 7)
To AMP assy 200W CN201
AMP assy 120W CN201 (➔SCH- 7)
KF200J815U
Csh
+12V
Sch
-12V
Lch
AG
AG
Rch
MG
VIDEO+12
LOUDNESS
VOL.UP
VOL.DOWN
WATT
MUTE
To PS AND FUNC assy (1/2)
CN805 (➔SCH- 4)
DYY10-200-2651
J3
TRANS assy (AWZ7591)
CN003
AKT1083
+BVH
+BVL
G
-BVL
-BVH
REG+B
G
REG-B
FL
FL
CN004
AKT1079
FU3 AKR-1004
FU4 AKR-1004
FU3, 4 : REK1076 (1.25A/125V)
J6
DYY06-200-2651
From POWER TRANSFORMER
To PS AND FUNC assy (1/2)
J3 (➔SCH- 4)
To PS AND FUNC assy (1/2)
J6 (➔SCH- 4)
REG assy (AWZ7592)
IC451- IC453 : REGULATOR
-26.0v
12v
+26.0v
R430 820 2W
IC451 NJM78M12FA5
IC453 NJM79M12FA
IC452 NJM78M12FA5
-11.6v
+12.0v
+4.4v
+26.0v
-27.7v
Q413, Q424 :
FAN DRIVE
Q410, Q411 : FAN SW
DTA124ES-T
DTC124ES-T
2SC1740S-T
2SC4793
MTZJ12B-TP
MTZJ13B-TP
V+12V
AD.GND
REG -B
AD.GND
REG +B
A-12V
REG +B
A+12V
REG +B
HIGH/LOW
D.GND
CN451
AKT1007
D15A11-150-2651
J9
To PS AND FUNC assy (1/2)
J9 (➔SCH- 4)
FAN
CN405 KR2003A2
FAN

NOTE FOR FUSE REPLACEMENT

CAUTION – FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

- This diagram is viewed from the mounted parts side.

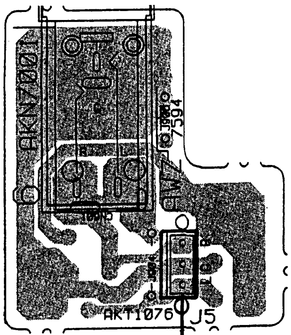
REG assy


78M12
79M12
78M12
2SC4793
12V
IC451
IC453
IC452
Q413
Q424
Q411
D410
Q409
R420
RS2LMF222J
J9
D15A11-150-2651
CN451
AKT1007
CN406
KM200SA2
R421
AWZ
AWK
J618
J619
J604
J620
IC451 IC453 IC452 Q424 Q410 Q413 Q411

To PS AND FUNC assy J9

To FAN MOTOR

H. P. assy


AKN7001
7594
AKT1076
J5

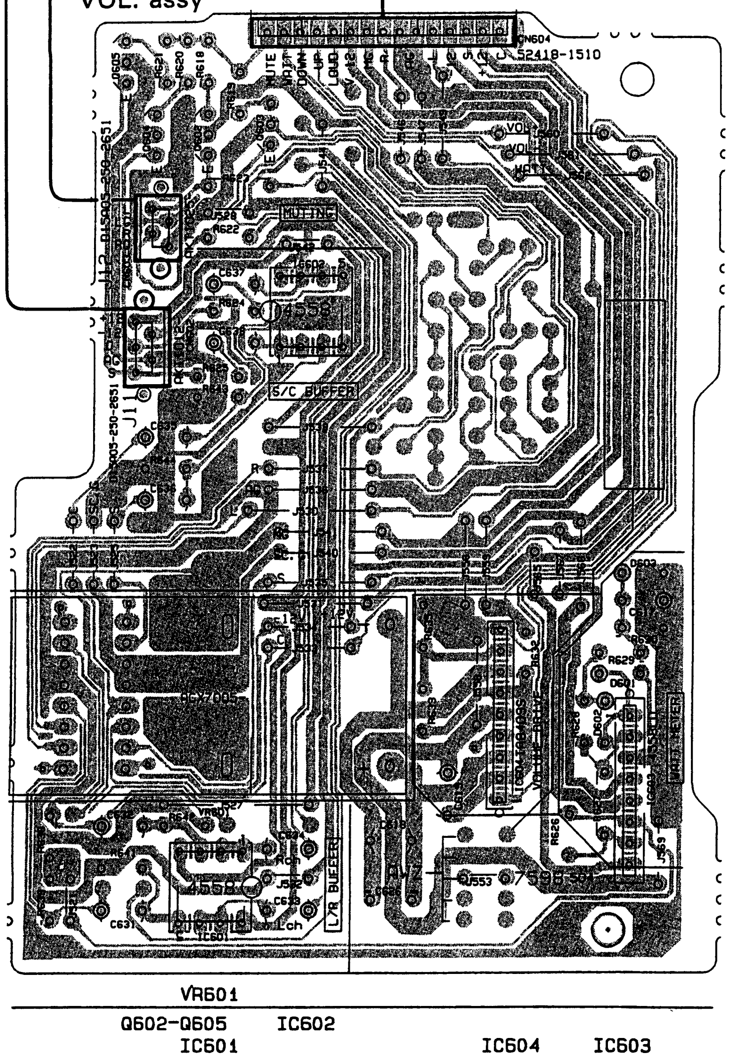
To PS AND FUNC assy CN409

To AMP assy 200W CN201
AMP assy 120W CN201

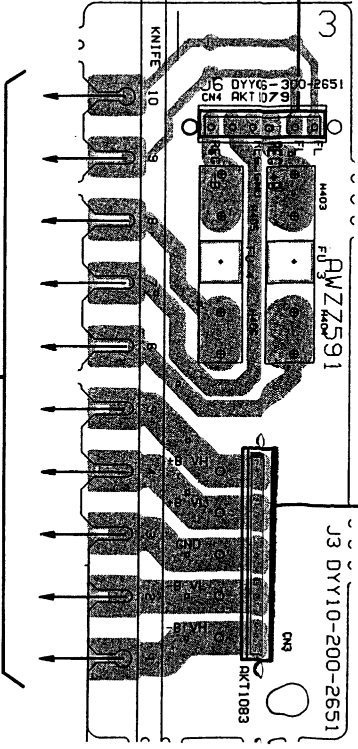
To AMP assy 200W CN203
AMP assy 120W CN203

To PS AND FUNC assy CN805

VOL. assy


CN604
52418-1510
MUTE
DOWN
UP
LOUD
VOL
MUTING
4558
S/C BUFFER
J11
J12
BCX70C
4558
Rch
Lch
L/R BUFFER
IC601
C631
AWZ
7595
D603
R629
D601
R626
VR601
Q602–Q605 IC602
IC601
IC604 IC603

TRANS assy


3
KNIFE
J6 DYY05-300-2651
CN4 AKT1079
FU
AWZ591
J3 DYY10-200-2651
CN3
AKT1083

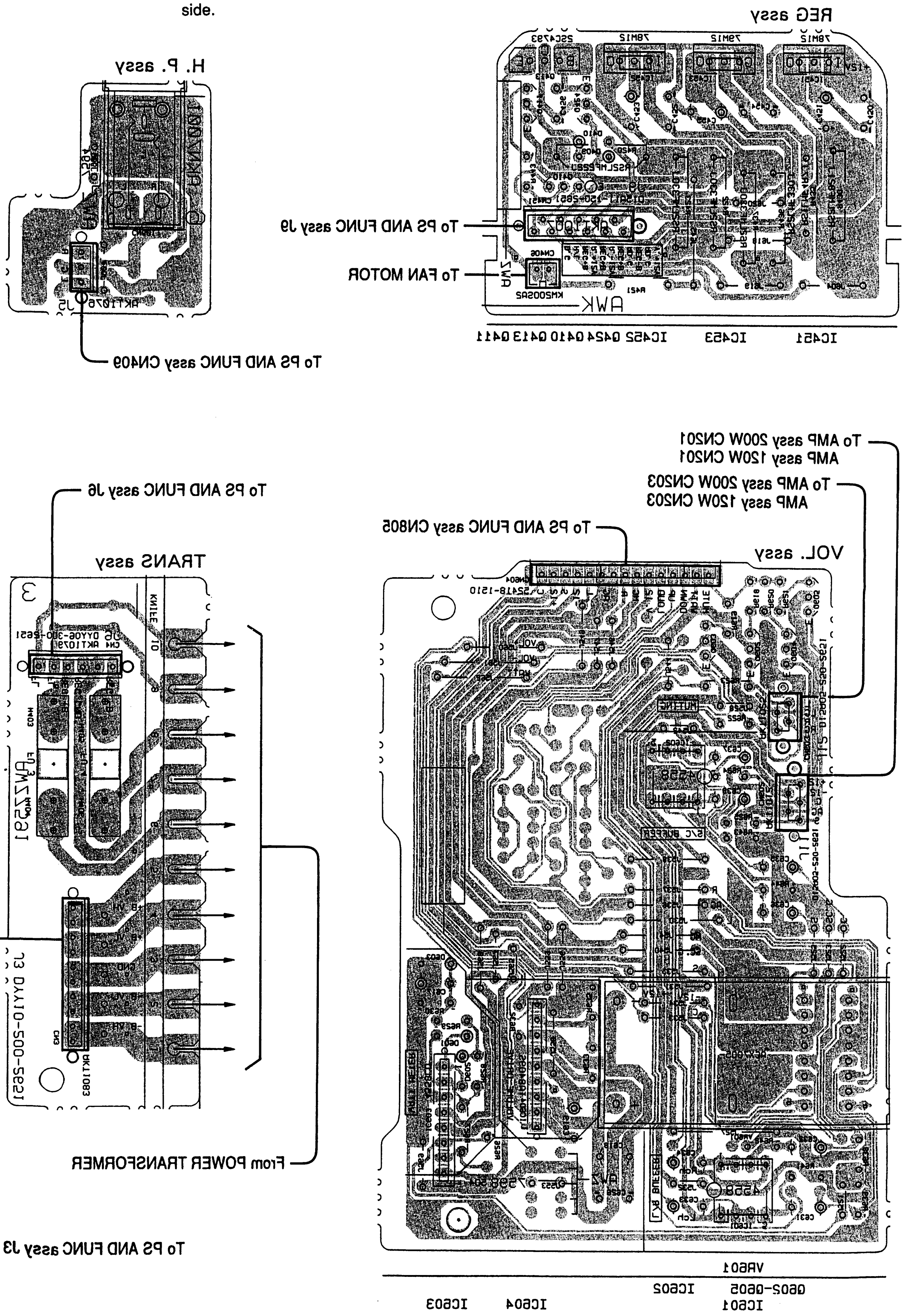
To PS AND FUNC assy J6

From POWER TRANSFORMER

To PS AND FUN; assy J3

PCB-4

- This diagram is viewed from the foil side.


H. P. assy
To PS AND FUNC assy CN409
REG assy
To PS AND FUNC assy J9
To FAN MOTOR
IC451
IC453
IC452 Q424 Q410 Q413 Q411
TRANS assy
To PS AND FUNC assy J6
From POWER TRANSFORMER
To PS AND FUNC assy J3
VOL. assy
To AMP assy 200W CN201
AMP assy 120W CN201
To AMP assy 200W CN203
AMP assy 120W CN203
To PS AND FUNC assy CN805
VR601
Q602–Q605
IC602
IC601
IC604
IC603

A

B

C

D

3

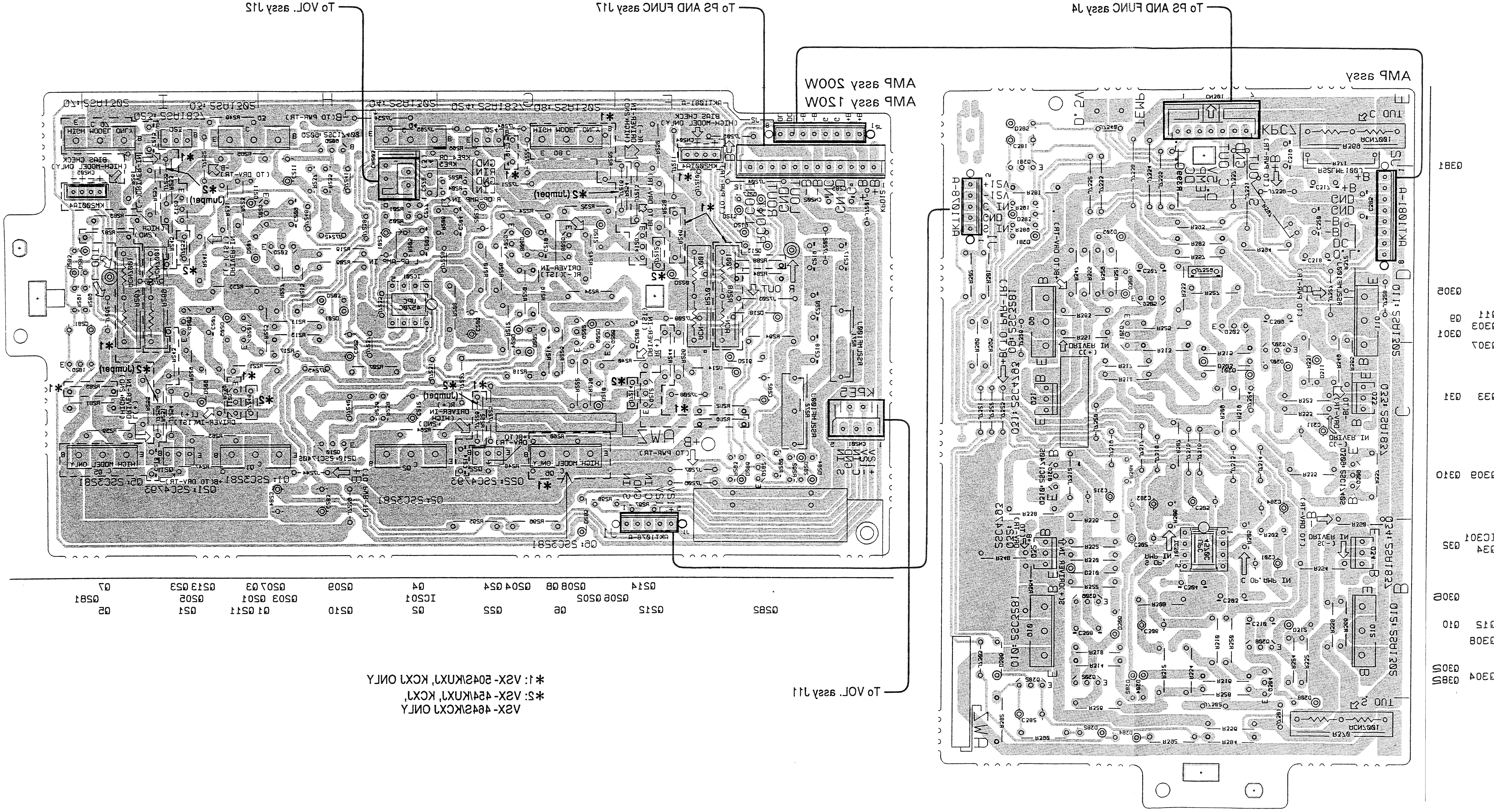
2

1

VSX-504S, VSX-464S, VSX-454

4.6 AMP ASSY, AMP ASSY 200W AND AMP ASSY 120W

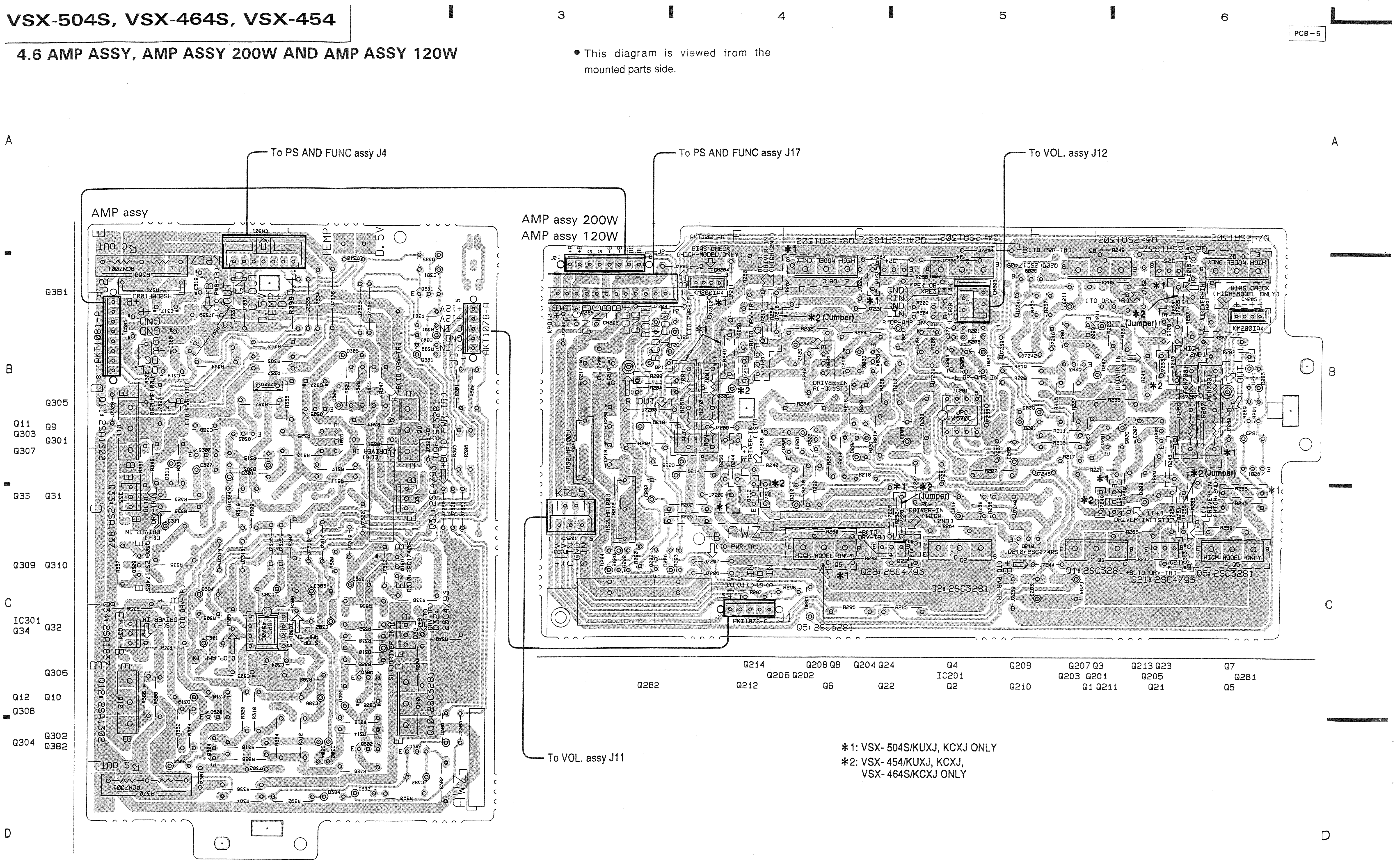
● This diagram is viewed from the foil side.


To VOL. assy J12
To PS AND FUNC assy J17
To PS AND FUNC assy J4
AMP assy 200W
AMP assy 120W
AMP assy
To VOL. assy J11
Q7 Q281 Q5 Q213 Q23 Q205 Q21 Q207 Q3 Q203 Q201 Q1 Q211 Q209 Q210 Q4 IC201 Q2 Q204 Q24 Q22 Q208 Q8 Q206 Q202 Q6 Q214 Q212 Q282
Q381 Q305 Q11 Q9 Q303 Q301 Q307 Q33 Q31 Q309 Q310 IC301 Q32 Q34 Q306 Q12 Q10 Q308 Q302 Q382 Q304

*1: VSX-504S/KUXJ, KCXJ ONLY
*2: VSX-454/KUXJ, KCXJ,
VSX-464S/KCXJ ONLY

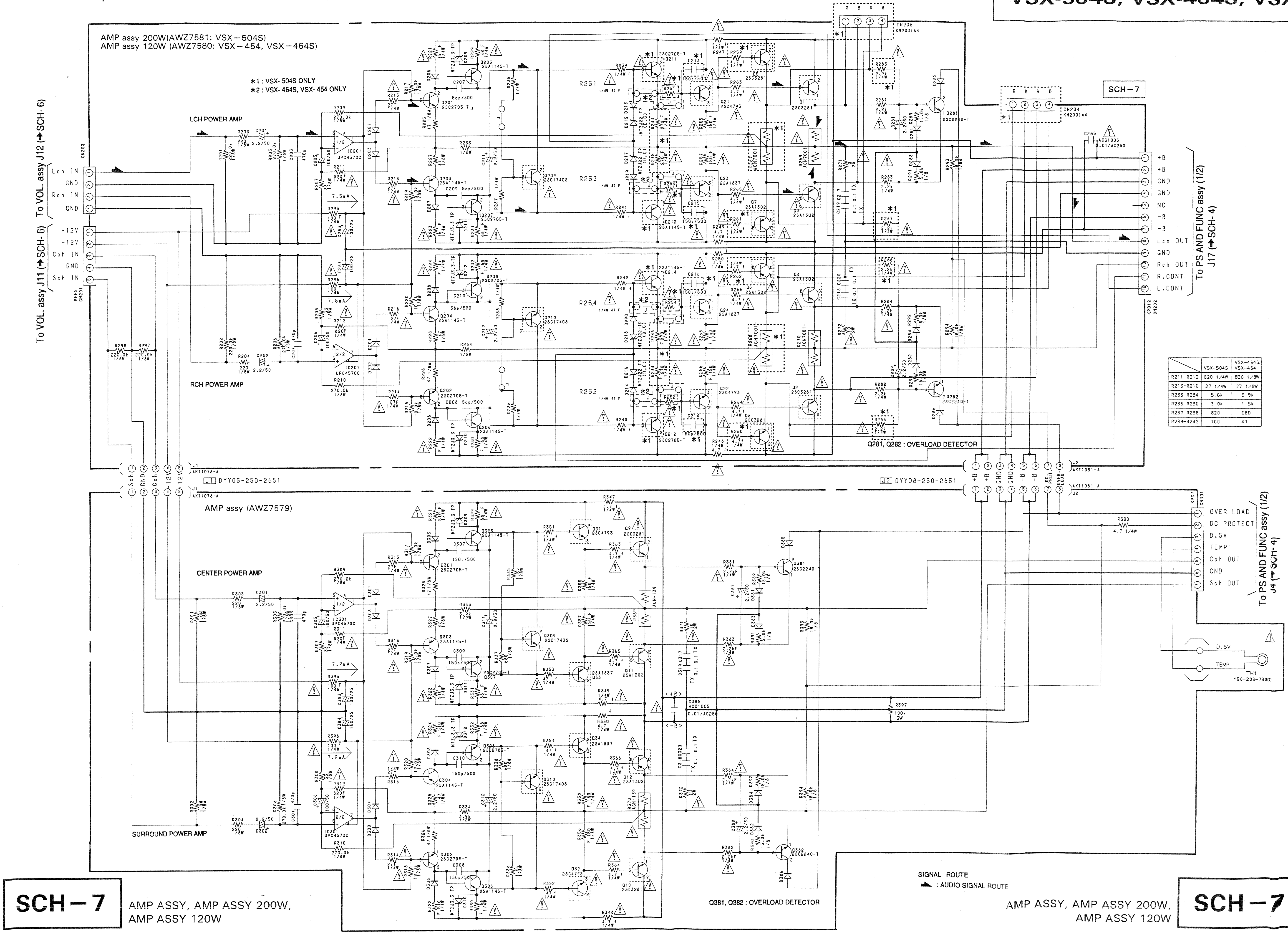
4.6 AMP ASSY, AMP ASSY 200W AND AMP ASSY 120W

- This diagram is viewed from the mounted parts side.


3
4
5
6
A
B
C
D
To PS AND FUNC assy J4
To PS AND FUNC assy J17
To VOL. assy J12
AMP assy
AMP assy 200W
AMP assy 120W
To VOL. assy J11
Q381
Q305
Q11 Q9
Q303 Q301
Q307
Q33 Q31
Q309 Q310
IC301 Q32
Q34
Q306
Q12 Q10
Q308
Q304 Q302
Q382
Q262
Q214 Q212
Q206 Q202
Q208 Q8
Q6
Q204 Q24
Q22
Q4
IC201
Q2
Q209
Q210
Q207 Q3
Q203 Q201
Q1 Q211
Q213 Q23
Q205
Q21
Q7
Q281
Q5
1
2
3
4
5
6

*1: VSX-504S/KUXJ, KCXJ ONLY

*2: VSX-454/KUXJ, KCXJ,
VSX-464S/KCXJ ONLY


AMP assy 200W(AWZ7581: VSX-504S)
AMP assy 120W (AWZ7580: VSX-454, VSX-464S)
*1 : VSX-504S ONLY
*2 : VSX-464S, VSX-454 ONLY
LCH POWER AMP
RCH POWER AMP
AMP assy (AWZ7579)
CENTER POWER AMP
SURROUND POWER AMP
To VOL. assy J12 (→SCH-6)
To VOL. assy J11 (→SCH-6)
Lch IN
GND
Rch IN
GND
+12V
-12V
Cch IN
GND
Sch IN
CN203
KPE5 CN201
J1 AKT1078-A
J1 DYY05-250-2651
J2 AKT1081-A
J2 DYY08-250-2651
CN205 KM200IA4
CN204 KM200IA4
SCH-7
To PS AND FUNC assy (1/2) J17 (→SCH-4)
+B
+B
GND
GND
NC
-B
-B
Lch OUT
GND
Rch OUT
R.CONT
L.CONT
KPD12 CN202
To PS AND FUNC assy (1/2) J4 (→SCH-4)
OVER LOAD
DC PROTECT
D.5V
TEMP
Cch OUT
GND
Sch OUT
KPC7 CN301
TH1 150-203-730D
Q281, Q282 : OVERLOAD DETECTOR
Q381, Q382 : OVERLOAD DETECTOR
7.5mA
7.2mA
IC201 UPC4570C
IC301 UPC4570C
C385 ACC1005 0.01/AC250
C285 ACC1005 0.01/AC250
R397 100k 2W
SIGNAL ROUTE
: AUDIO SIGNAL ROUTE

	VSX-504S	VSX-464S. VSX-454
R211, R212	820 1/4W	820 1/8W
R213–R216	27 1/4W	27 1/8W
R233, R234	5.6k	3.9k
R235, R236	3.0k	1.5k
R237, R238	820	680
R239–R242	100	47

SCH-7

AMP ASSY, AMP ASSY 200W,
AMP ASSY 120W

5. PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

$560\Omega \rightarrow 56 \times 10^1 \rightarrow 561$ .... RD1/8PM $\boxed{5}\,\boxed{6}\,\boxed{1}$ J
$47k\Omega \rightarrow 47 \times 10^3 \rightarrow 473$ .... RD1/4PS $\boxed{4}\,\boxed{7}\,\boxed{3}$ J
$0.5\Omega \rightarrow 0R5$ .... RN2H $\boxed{0}\,\boxed{R}\,\boxed{5}$ K
$1\Omega \rightarrow 010$ .... RS1P $\boxed{0}\,\boxed{1}\,\boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

$5.62k\Omega \rightarrow 562 \times 10^1 \rightarrow 5621$ .... RM1/4PC $\boxed{5}\,\boxed{6}\,\boxed{2}\,\boxed{1}$ F

LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.					Remarks
		VSX−504S		VSX−454		VSX−464S	
		KUXJ	KCXJ	KUXJ	KCXJ	KCXJ	
	FM/AM TUNER MODULE	AXQ3112	AXQ3112	AXQ3112	AXQ3112	AXQ3112	
NSP	MOTHER assy	AWK7124	AWK7124	AWK7127	AWK7127	AWK7127	
	├ PS AND FUNC assy	AWZ7597	AWZ7597	AWZ7601	AWZ7601	AWZ7601	
	├ VOL. assy	AWZ7602	AWZ7602	AWZ7602	AWZ7602	AWZ7602	
NSP	├ TRANS assy	AWZ7591	AWZ7591	AWZ7591	AWZ7591	AWZ7591	
	└ REG assy	AWZ7592	AWZ7592	AWZ7592	AWZ7592	AWZ7592	
NSP	FL AND AMP assy	AWK7125	AWK7125	AWK7128	AWK7128	AWK7128	
	├ FL AND UCOM assy	AWZ7599	AWZ7599	AWZ7603	AWZ7603	AWZ7603	
NSP	├ H. P. assy	AWZ7594	AWZ7594	AWZ7594	AWZ7594	AWZ7594	
	├ AMP assy	AWZ7579	AWZ7579	AWZ7579	AWZ7579	AWZ7579	
	├ AMP assy 200W	AWZ7581	AWZ7581	Not used	Not used	Not used	
	└ AMP assy 120W	Not used	Not used	AWZ7580	AWZ7580	AWZ7580	

CONTRAST OF PCB ASSEMBLIES

PS AND FUNC ASSY

AWZ7597 and AWZ7601 have the same construction except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWZ7597	AWZ7601	
	D422−D424	1SR139−100	Not used	
	D472	1SS252	Not used	
	C413, C414 (12000μF/80V)	ACH7010	Not used	
	C413, C414 (8200μF/71V)	Not used	ACH7018	
	C415	CEAS102M25	CEAS471M25	
	RY401	ASR1036	ASR1044	
	R439	RD1/2PM470J	RD1/2PM680J	
	R1812, R1827	RD1/8PM392J	RD1/8PM562J	

FL AND UCOM ASSY

AWZ7599 and AWZ7603 have the same construction except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWZ7599	AWZ7603	
	D956	1SS252	Not used	
	S907−S909	ASG1034	Not used	

AMP ASSY 200W (AWZ7581) AND AMP ASSY 120W (AWZ7580)

AWZ7581 and AWZ7580 have the same construction except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWZ7581	AWZ7580	
	Q211, Q212	2SC2705	Not used	
	Q213, Q214	2SA1145	Not used	
	C213−C216	CCCSL151K500	Not used	
	VR201, VR202	VRTS6HS102	Not used	
	R211, R212	RD1/4PMF821J	RD1/8PM821J	
	R213−R216	RD1/4PMF270J	RD1/8PM270J	
	R233, R234	RD1/2PM562J	RD1/2PM392J	
	R235, R236	RN1/4PC3001F	RN1/4PC1501F	
	R237, R238	RN1/4PC8200F	RN1/4PC6800F	
	R239−R242	RF1/4PS101J	RF1/4PS470J	
	R243−R246	RD1/4PMF271J	Not used	
	R251−R254	RD1/4PMF470J	Not used	
	R259−R262	RF1/4PS4R7J	Not used	
	R267, R268 (0.33Ω/5W)	ACN7001	Not used	
	R281−R284	RD1/4PMFL222J	RD1/4PMF222J	
	R285−R288	RD1/4PMFL222J	Not used	

PARTS LIST FOR VSX−504S/KUXJ

FM/AM TUNER MODULE

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC6201	AM/FM +MPX IC	LA1836M
	IC6202	PLL IC	LM7001J
	Q6101	DUALGATE−FETA (CHIP)	3SK194
	Q6102	TRANSISTOR	2SC2223
	Q6103	TRANSISTOR	2SC2714
	Q6104	MOS−FET	2SK302
	Q6201	NCH−FET (SMD)	2SK208
	Q6202	TRANSISTOR	2SC2712
	Q6203	TRANSISTOR	2SC2235
	Q6204	TRANSISTOR	XDA124EK
	Q6214	TRANSISTOR	2SC2714
	Q6217	TRANSISTOR	XDC124EK
	D6101, 6102	VARI−CAP DIODE	1T33

COILS AND FILTERS

Mark	No.	Description	Parts No.
	F6101	CERAMIC FILTER	ATF−155
	F6202	AM CERAMIC FILTER	ATF1155
	F6203, 6204	CERAMIC FILTER	ATF−119
	L6101	COIL	ATC1020
	L6102	COIL	ATC1021
	L6103	TIP COIL	ATH1043
	L6104	COIL	ATC1003
	L6202, 6203	CHIP COIL	LCTA2R2J3225
	L6207	FM DETECTION COIL	ATE1013
	L6208	CHIP COIL	LCTA2R2J3225

TRANSFORMER

Mark	No.	Description	Parts No.
	T6101	FM IF TRANS.	ATE−063

OTHERS

Mark	No.	Description	Parts No.
	CN6201	14P SOCKET	KP200IA14L

CAPACITORS

Mark No.	Description	Parts No.
C6101	CHIP CAPACITOR	CCSQCH050C50
C6102	CERAMIC CAPACITOR	CKSQYB103K50
C6103	CHIP CAPACITOR	CKSQYB102K50
C6105	CHIP CAPACITOR	CCSQTH150J50
C6106	CHIP CAPACITOR	CKSQYB102K50
C6107	CHIP CPAPCITOR	CCSCH010C50
C6108	CHIP CAPACITOR	CCSQCH101J50
C6109	CERAMIC CAPACITOR	CKSQYB103K50
C6110	CHIP CAPACITOR	CCSQCH020C50
C6111	CHIP CERAMIC C.	CCSQCH150J50
C6112	CHIP CAPACITOR	CKSQYB102K50
C6113	CHIP CAPACITOR	CCSQRH180J50
C6114	CHIP CAPACITOR	CCSQRH080D50
C6115	CHIP CAPACITOR	CCSQCH330J50
C6116	CHIP CERAMIC C.	CCSQCH150J50
C6117	CERAMIC CAPACITOR	CKSQYB103K50
C6202	CAPACITOR (CERAMIC)	ACG1051
C6203	CHIP CAPACITOR	CCSQCH101J50
C6204	CHIP CAPACITOR	CKSQYB102K50
C6208	CHIP CERAMIC C.	CCSQCH150J50
C6209	CERAMIC CAPACITOR	CKSQYB473K50
C6210	CERAMIC CAPACITOR	CKSQYB103K50
C6212	CHIP CAPACITOR	CKSQYF103Z50
C6213	CHIP CAPACITOR	CKSQYB223K50
C6214	AUDIO FILM CAPACITOR	CFTXA224J50
C6215	AUDIO FILM CAPACITOR	CFTXA103J50
C6216, 6217	ELECT. CAPACITOR	CEAS330M16
C6218	CHIP CAPACITOR	CKSQYF103Z50
C6219	ELECT. CAPACITOR	CEAS470M10
C6220	CHIP CAPACITOR	CKSQYF223Z50
C6221, 6222	CHIP CERAMIC C.	CCSQCH150J50
C6223	CHIP CAPACITOR	CKSYF103Z50
C6224	ELECT. CAPACITOR	CEAS100M50
C6225	CERAMIC CAPACITOR	CKSQYF473Z50
C6226	CHIP CAPACITOR	CKSQYF223Z50
C6227	ELECT. CAPACITOR	CEAS470M25
C6228	CERAMIC CAPACITOR	CKSQYB472K50
C6229	CERAMIC CHIP C.	CCSCH821J50
C6230	CERAMIC CAPACITOR	CKSQYB333K50
C6231	ELECT. CAPACITOR	CEAS3R3M50
C6232	CERAMIC CAPACITOR	CKSYB333K50
C6233	ELECT. CAPACITOR	CEAS3R3M50
C6234	CAPACITOR (CERAMIC)	ACG1051
C6235	CERAMIC CAPACITOR	CKSQYF224Z25
C6236	CAPACITOR (CERAMIC)	ACG1051
C6237	CERAMIC CAPACITOR	CKSQYB473K50
C6238	ELECT. CAPACITOR	CEJA100M16
C6239	CHIP CAPACITOR	CKSQYF223Z50
C6241	CERAMIC CAPACITOR	CKSQYF473Z50
C6242	CHIP CAPACITOR	CKSQYF223Z50
C6243–6245	ELECT. CAPACITOR	CEAS470M16
C6246	ELECT. CAPACITOR	CEAS100M50
C6249, 6250	ELECT. CAPACITOR	CEJA4R7M35
C6251	CHIP CAPACITOR	CKSYB472K50
C6252	CERAMIC CAPACITOR	CKSQYB472K50
C6255	CHIP CAPACITOR	CKSQYF223Z50
C6261	ELECT. CAPACITOR	CEAS010M50
C6262	ELECT. CAPACITOR	CEAS100M50
C6263	CHIP CAPACITOR	CKSYF473Z50
C6264	CERAMIC CAPACITOR	CKSQYB103K50
C6265	CERAMIC CAPACITOR	CKSQYB473K50
C6266	CERAMIC CAPACITOR	CKSQYF473Z50
C6267	CERAMIC CAPACITOR	CKSQYB473K50
C6268	CHIP CAPACITOR	CCSQCH101J50

RESISTORS

Mark No.	Description	Parts No.
VR6201	VARIABLE RESISTOR (10kΩ)	ACP1056
VR6202	VARIABLE RESISTOR	VRTB6VS223
R6101	CHIP RESISTOR	RS1/8S470J
R6113, 6116	CHIP RESISTOR	RS1/8S000J
R6118	CHIP RESISTOR	RS1/8S000J
R6209	CHIP RESISTOR	RS1/8S221J
R6211	CHIP RESISTOR	RS1/8S103J
R6237	CHIP RESISTOR	RS1/8S182J
R6239	CHIP RESISTER	RS1/8S332J
R6243, 6244	CHIP RESISTOR	RS1/8S101J
R6268–6271	CHIP RESISTOR	RS1/8S000J
R6275, 6276	CHIP RESISTOR	RS1/8S000J
R6278, 6283	CHIP RESISTOR	RS1/8S000J
R6284, 6290	CHIP RESISTOR	RS1/8S000J
R6293, 6294	CHIP RESISTOR	RS1/8S000J
R6297	CHIP RESISTOR	RS1/8S000J
R6299, 6300	CARBON FILM RESISTOR	RD1/8PM102J
	Other Resistors	RS1/10S□□□J

OTHERS

Mark No.	Description	Parts No.
	AM RF TUNING BLOCK	AXX1025
BN6201	TERMINAL 4–P	AKA1016
X6201	CRYSTAL RESONATOR	ASS1066
X6202	CERAMIC RESONATOR	ATF1027
X6203	CRYSTAL RESONATOR	ASS1042

PS AND FUNC ASSY

SEMICONDUCTORS

Mark No.	Description	Parts No.
IC1801, 1802	OP–AMP IC	NJM4558D–D
IC1803	IC	LV1010N
IC1804	IC	LA2785
IC701	OP–AMP IC	NJM4558D–D
IC702	LOGIC IC	BU4052BC
IC703	E–SW IC	TC9163AN
IC704	OP–AMP IC	NJM4558D–D
IC801	VIDEO SEITCH	LA7952
Q1801	TRANSISTOR	2SD468
Q402–404	TRANSISTOR	DTC143ES
Q406	TRANSISTOR	2SA1515
Q407–409	TRANSISTOR	2SC1740S
Q416	TRANSISTOR	2SC1740S
Q417	TRANSISTOR	DTC143ES
Q418	TRANSISTOR	2SC2878
Q419, 420	TRANSISTOR	2SA933S
Q421	TRANSISTOR	DTC124ES
Q422	TRANSISTOR	2SA933S
Q423	TRANSISTOR	DTC124ES
Q470	TRANSISTOR	2SA933S
Q471	TRANSISTOR	DTC124ES
Q481, 482	TRANSISTOR	2SC2878
Q483	TRANSISTOR	DTA143ES
Q485, 486	TRANSISTOR	2SC2878
Q707, 708	TRANSISTOR	DTA143ES
Q791, 792	TRANSISTOR	2SC1740S
Q801	TRANSISTOR	2SC1740S
Q802	TRANSISTOR	2SC2878
D1809–1812	DIODE	1SS252
D1813	ZENER DIODE	MTZJ9.1C
D402–404	DIODE	1SS252
D407	DIODE	1SS252
D408	ZENER DIODE	MTZJ4.3C
D411	DIODE	1SS252
D412	ZENER DIODE	MTZJ18C
D415	DIODE	1SS252

Mark	No.	Description	Parts No.
	D416	ZENER DIODE	MTZJ5.1A
	D417	ZENER DIODE	MTZJ5.6C
	D418	DIODE	1SS252
	D419	ZENER DIODE	MTZJ5.6A
	D420	DIODE	1SS252
	D421	DIODE	D5SBA20 (B)
	D422–425	DIODE	1SR139–100
	D426	DIODE	1SS252
	D427–430	DIODE	1SR139–100
	D433	DIODE	D5SBA20 (B)
	D435–437	DIODE	1SS252
	D438–441	ZENER DIODE	MTZJ18B
	D470, 472	DIODE	1SS252
	D473–475	DIODE	1SS252
	D491–495	DIODE	1SS252
	D703, 801	DIODE	1SS252

RELAYS

	RY401	RELAY	ASR1036
	RY402, 403	RELAY	ASR1044
	RY404, 405	RELAY	ASR7001
	RY407, 408	RELAY	ASR7001

TRANSFORMER

	T401	POWER TRANSFORMER	ATT1223

CAPACITORS

	C1801–1803	CERAMIC CAPACITOR	CCCCH101J50
	C1804	ELECT. CAPACITOR	CEAS2R2M50
	C1806	ELECT. CAPACITOR	CEAS100M50
	C1807	ELECT. CAPACITOR	CEAS2R2M50
	C1808	CERAMIC CAPACITOR	CKCYX104M25
	C1809	ELECT. CAPACITOR	CEAS100M50
	C1810	ELECT. CAPACITOR	CEAS2R2M50
	C1811	CERAMIC CAPACITOR	CKCYX104M25
	C1812	ELECT. CAPACITOR	CEAS100M50
	C1813	ELECT. CAPACITOR	CEAS2R2M50
	C1814	CERAMIC CAPACITOR	CKCYX104M25
	C1815	ELECT. CAPACITOR	CEAS100M50
	C1816	ELECT. CAPACITOR	CEAS470M25
	C1817	ELECT. CAPACITOR	CEAS221M16
	C1819	ELECT. CAPACITOR	CEAS221M10
	C1820	AUDIO FILM CAPACITOR	CFTXA333J50
	C1821	PLASTIC FILM CAPACITOR	CQMA152J50
	C1822	AUDIO FILM CAPACITOR	CFTXA333J50
	C1823	ELECT. CAPACITOR	CEAS010M50
	C1825	ELECT. CAPACITOR	CEAS2R2M50
	C1826	ELECT. CAPACITOR	CEAS100M50
	C1830	PLASTIC FILM CAPACITOR	CQMA681J50
	C1831–1833	ELECT. CAPACITOR	CEAS100M50
	C1834	ELECT. CAPACITOR	CEAS470M25
	C1835, 1836	AUDIO FILM CAPACITOR	CFTXA104J50
	C1837	ELECT. CAPACITOR	CEASR47M50
	C1838	ELECT. CAPACITOR	CEANL4R7M50
	C1839	ELECT. CAPACITOR	CEASR47M50
	C1840	ELECT. CAPACITOR	CEANL4R7M50
	C1841	ELECT. CAPACITOR	CEASR15M50
	C1842	ELECT. CAPACITOR	CEANL3R3M50
	C1843	AUDIO FILM CAPACITOR	CFTXA154J50
	C1844	PLASTIC FILM CAPACITOR	CQMA223J50
	C1845	PLASTIC FILM CAPACITOR	CQMA473J50
	C1846	ELECT. CAPACITOR	CEAS221M16
	C1847–1850	ELECT. CAPACITOR	CEAS100M50
	C1851	ELECT. CAPACITOR	CEAS221M16
	C1852, 1853	ELECT. CAPACITOR	CEAS100M50
	C1854, 1855	AUDIO FILM CAPACITOR	CFTXA104J50
	C1856	ELECT. CAPACITOR	CEASR47M50
Mark	**No.**	**Description**	**Parts No.**
	C1857	ELECT. CAPACITOR	CEANL4R7M50
	C1858	ELECT. CAPACITOR	CEASR47M50
	C1859	ELECT. CAPACITOR	CEANL4R7M50
	C1860	ELECT. CAPACITOR	CEASR15M50
	C1861	ELECT. CAPACITOR	CEANL3R3M50
	C1862	AUDIO FILM CAPACITOR	CFTXA154J50
	C1863	AUDIO FILM CAPACITOR	CFTXA474J50
	C1864, 1865	CERAMIC CAPACITOR	CKCYX473M25
	C400	ELECT. CAPACITOR	CEAS470M25
	C406	ELECT. CAPACITOR	CEAS221M16
	C407	ELECT. CAPACITOR	CEAS470M50
	C410	ELECT. CAPACITOR	CEAS100M50
	C412	ELECT. CAPACITOR	CEAS470M25
	C413, 414	ELECT. CAPACITOR (12000μF/80V)	ACH7010
	C415	ELECT. CAPACITOR	CEAS102M25
	C416	ELECT. CAPACITOR	CEAS102M35
	C417	ELECT. CAPACITOR	CEAS222M35
	C418	CKA (0.01μF/AC250V)	ACG1005
	C419	CERAMIC CAPACITOR	CKCYX104M25
	C420	CKA (0.01μF/AC400V)	ACG1054
	C421	CKA (0.01μF/AC250V)	ACG1005
	C422	CKA (0.01μF/AC400V)	ACG1054
	C713, 714	ELECT. CAPACITOR	CEAS100M50
	C727, 728	CERAMIC CAPACITOR	CCCSL221J50
	C729, 730	ELECT. CAPACITOR	CEAS101M25
	C733, 734	PLASTIC FILM CAPACITOR	CQMA822J50
	C735, 736	PLASTIC FILM CAPACITOR	CQMA242J50
	C737, 738	ELECT. CAPACITOR	CEAS2R2M50
	C739, 740	ELECT. CAPACITOR	CEAS470M25
	C741, 742	CERAMIC CAPACITOR	CKCYB102K50
	C743, 744	ELECT. CAPACITOR	CEAS100M50
	C745, 746	CERAMIC CAPACITOR	CKCYF103Z50
	C747	CERAMIC CAPACITOR	CKCYB102K50
	C748	ELECT. CAPACITOR	CEAS101M25
	C749, 750	ELECT. CAPACITOR	CEAS2R2M50
	C751, 752	ELECT. CAPACITOR	CEAS4R7M50
	C753	CERAMIC CAPACITOR	CKCYF103Z50
	C754	ELECT. CAPACITOR	CEAS101M25
	C755	CERAMIC CAPACITOR	CKCYF103Z50
	C801, 802	ELECT. CAPACITOR	CEAS4R7M50
	C803, 804	ELECT. CAPACITOR	CEAS471M6
	C806	ELECT. CAPACITOR	CEAS470M25
	C809, 810	ELECT. CAPACITOR	CEAS101M25
	C811, 812	CERAMIC CAPACITOR	CKCYF473Z50

RESISTORS

	R417	RESISTOR (150Ω, 5W)	ACN7002
	R431	METAL OXIDE RESISTOR	RS2LMF101J
	R433	METAL OXIDE RESISTOR	RS2LMF151J
	R439	CARBON FILM RESISTOR	RD1/2PM470J
	R440	CARBON FILM RESISTOR	RD1/2PM560J
	R441	RESISTOR (2.2MΩ, 1/2W)	ACN–208
	R447, 448	METAL OXIDE RESISTOR	RS2LMF331J
	R494	CARBON FILM RESISTOR	RD1/2PMF820J
	R807	CARBON FILM RESISTOR	RD1/2PM271J
		Other Resistors	RD1/8PM□□□J

OTHERS

		CABLE HOLDER (7P)	AKT1080
		CABLE HOLDER (12P)	AKT1085
		CABLE HOLDER (6P)	AKT1079
		CABLE HOLDER	AKT1007
		AC SOCKET 1–P	AKP1060
	CN401	SPEAKER TERMINAL 6–P	AKE7005
	CN402	CONNECTOR (7P)	KPE7

Mark	No.	Description	Parts No.
	CN404	2P PIN JACK	AKB7001
	CN407	JACK	AKN1006
	CN420	40P SOCKET	AKP1085
	CN421	SPEAKER TERMINAL 8-P	AKE7006
	CN701	14P PLUG	KM200IA14
	CN702	PIN JACK (12P)	AKB7004
	CN703	6P PIN JACK (TAPE2)	AKB7003
	CN805	15P PLUG	53290-1510
	X1801	CERAMIC RESONATOR	ASS1015

VOL. ASSY

SEMICONDUCTORS

	IC601	OP-AMP IC	NJM4558D-D
	IC602	OP-AMP IC	NJM4558LD
	IC603	OP-AMP IC	NJM4558D-D
	IC604	MECHANISM DRIVER IC	TA8409S
	Q602-605	TRANSISTOR	2SC2878
	D601, 602	DIODE	1SS252
	D603	ZENER DIODE	MTZJ5.1B

CAPACITORS

	C617	ELECT. CAPACITOR	CEASR47M50
	C618	ELECT. CAPACITOR	CEANP101M10
	C619	ELECT. CAPACITOR	CEAS101M25
	C626	CERAMIC CAPACITOR	CKCYF473Z50
	C631-638	ELECT. CAPACITOR	CEAS100M50

RESISTORS

	VR601	VARIABLE RESISTOR	ACX7005
		Other Resistors	RD1/8PM□□□J

OTHERS

		CABLE HOLDER	AKT1012
	CN604	15P SOCKET	52418-1510

TRANS ASSY

OTHERS

		CABLE HOLDER (6P)	AKT1079

REG. ASSY

SEMICONDUCTORS

	IC451, 452	REGULATOR IC	NJM78M12FAS
	IC453	REGULATOR IC	NJM79M12FA
	Q410	TRANSISTOR	DTA124ES
	Q411	TRANSISTOR	DTC124ES
	Q413	TRANSISTOR	2SC4793
	Q424	TRANSISTOR	2SC1740S
	D409	ZENER DIODE	MTZJ13B
	D410	ZENER DIODE	MTZJ12B

CAPACITORS

	C450	CERAMIC CAPACITOR	CKCYF102Z50
	C451	ELECT. CAPACITOR	CEAS101M25
	C452	CERAMIC CAPACITOR	CKCYF102Z50
	C453	ELECT. CAPACITOR	CEAS101M25
	C454	CERAMIC CAPACITOR	CKCYF102Z50
	C455	ELECT. CAPACITOR	CEAS101M25
	C456	CERAMIC CAPACITOR	CKCYF103Z50

RESISTORS

	R420	METAL OXIDE RESISTOR	RS2LMF222J
	R421	CARBON FILM RESISTOR	RD1/4PMF2R2J
	R422, 423	METAL OXIDE RESISTOR	RS2LMF330J
	R430	METAL OXIDE RESISTOR	RS2LMF821J
	R435	METAL OXIDE RESISTOR	RS1LMF4R7J
	R436, 437	METAL OXIDE RESISTOR	RS2LMF330J
	R443	CARBON FILM RESISTOR	RD1/8PM223J

OTHERS

		CABLE HOLDER	AKT1007

FL AND UCOM ASSY

SEMICONDUCTORS

	IC901	PORT-EXPANDER IC	M66320P
	IC902	CONTROL MCU	PDG133A
	IC951, 952	OP-AMP IC	NJM4558D-D
	Q902, 903	TRANSISTOR	2SC1740S
	Q907, 908	TRANSISTOR	DTC143ES
	Q909	TRANSISTOR	DTC124ES
	Q951, 952	TRANSISTOR	2SC1740S
	Q953, 954	TRANSISTOR	DTC143ES
	D2104-2106	DIODE	1SS252
	D902	DIODE	1SS252
	D906-909	LED	AEL1100
	D910-918	DIODE	1SS252
	D920-923	DIODE	1SS252
	D953	ZENER DIODE	MTZJ2.7
	D956, 958	DIODE	1SS252

SWITCHES

	S901	SWITCH	ASG1034
	S903-905	SWITCH	ASG1034
	S907-909	SWITCH	ASG1034
	S912-919	SWITCH	ASG1034
	S921-926	SWITCH	ASG1034
	S928, 929	SWITCH	ASG1034
	S941	ROTARY ENCODER	ASX1015

COIL

	L901	AXIAL INDUCTOR	LAU220K

CAPACITORS

	C2104	ELECT. CAPACITOR	CEAS221M10
	C901	CERAMIC CAPACITOR	CKPUYF103Z25
	C902	CERAMIC CAPACITOR	CKCYX103M25
	C903	ELECT. CAPACITOR	CEAS101M10
	C904	CERAMIC CAPACITOR	CKDYF102Z50
	C905	CERAMIC CAPACITOR	CKCYF473Z50
	C906	ELECT. CAPACITOR	CEAS0R1M50
	C907	ELECT. CAPACITOR	CEAS100M50
	C908	CAPACITOR	ACH7013
	C909	ELECT. CAPACITOR	CEJA101M10
	C910	CERAMIC CAPACITOR	CKCYF473Z50
	C911	ELECT. CAPACITOR	CEJA221M6
	C951, 952	CERAMIC CAPACITOR	CCCSL151J50
	C953, 954	AUDIO FILM CAPACITOR	CFTXA153J50
	C955, 956	ELECT. CAPACITOR	CEJAR47M50
	C957, 958	ELECT. CAPACITOR	CEJA100M50
	C959, 960	ELECT. CAPACITOR	CEJA0R1M50
	C961, 962	AUDIO FILM CAPACITOR	CFTXA153J50
	C963, 964	AUDIO FILM CAPACITOR	CFTXA823J50
	C965	ELECT. CAPACITOR	CEJA4R7M35
	C966	ELECT. CAPACITOR	CEAS4R7M50
	C967	ELECT. CAPACITOR	CEJA100M16
	C968	ELECT. CAPACITOR	CEAS100M50
	C993	CERAMIC CAPACITOR	CKCYB152K50
	C994	CERAMIC CAPACITOR	CKCYB102K50

RESISTORS

Mark No.	Description	Parts No.
VR951, 952	VARIABLE RESISTOR	ACS1106
VR953	VARIABLE RESISTOR (500K−X1)	ACS1016
R912−916	CARBON FILM RESISTOR	RD1/2PM332J
R989, 990	CARBON FILM RESISTOR	RD1/2PM332J
	Other Resistors	RD1/8PM□□□J

OTHERS

Mark No.	Description	Parts No.
	REMOTE RECEIVER UNIT	AXX1023
CN901	40P SOCKET	AKP1087
V901	FL TUBE	AAV7013
X901	CERAMIC RESONATOR	ASS1015

H. P. ASSY

OTHERS

Mark No.	Description	Parts No.
	JACK	AKN7001
	CABLE HOLDER (3P)	AKT1076

AMP ASSY

SEMICONDUCTORS

Mark No.	Description	Parts No.
IC301	IC	UPC4570C
Q301, 302	TRANSISTOR	2SC2705
Q303−306	TRANSISTOR	2SA1145
Q307, 308	TRANSISTOR	2SC2705
Q381, 382	TRANSISTOR	2SC2240
D301−308	DIODE	1SS252
D309−312	ZENER DIODE	MTZJ3.3
D381−386	DIODE	1SS252

CAPACITORS

Mark No.	Description	Parts No.
C301, 302	ELECT. CAPACITOR	CEAS2R2M50
C303, 304	CERAMIC CAPACITOR	CKCYB471K50
C305, 306	ELECT. CAPACITOR	CEAS101M50
C307−310	CERAMIC CAPACITOR	CCCSL151K500
C311, C312	ELECT. CAPACITOR	CEAS2R2M50
C317−320	AUDIO FILM CAPACITOR	CFTXA104J50
C381, 382	ELECT. CAPACITOR	CEAS2R2M50
C383, 384	ELECT. CAPACITOR	CEAS101M25
C385	CKA (0.01μF/AC250V)	ACG1005

RESISTORS

Mark No.	Description	Parts No.
R313−316	CARBON FILM RESISTOR	RD1/4PMF270J
R321−324	CARBON FILM RESISTOR	RD1/4PMF511J
R329−332	CARBON FILM RESISTOR	RD1/4PMF680J
R333, 334	CARBON FILM RESISTOR	RD1/2PM392J
R347−350	FUSIBLE RESISTOR	RF1/4PS4R7J
R351−354	FUSIBLE RESISTOR	RF1/4PS470J
R355−358	CARBON FILM RESISTOR	RD1/4PMF151J
R363−366	FUSIBLE RESISTOR	RF1/4PS4R7J
R369, 370	RESISTOR (0.33Ω, 5W)	ACN7001
R371, 372	METAL OXIDE RESISTOR	RS2LMF100J
R381−384	CARBON FILM RESISTOR	RD1/4PMF222J
R395, 396	CARBON FILM RESISTOR	RD1/4PMF101J
R397	METAL OXIDE RESISTOR	RS2LMF104J
R399	FUSIBLE RESISTOR	RF1/4PS4R7J
	Other Resistors	RD1/8PM□□□J

OTHERS

Mark No.	Description	Parts No.
	CABLE HOLDER (8P)	AKT1081
⚠ TH1	THERMISTOR	150−203−73002

AMP ASSY 200W

SEMICONDUCTORS

Mark No.	Description	Parts No.
IC201	IC	UPC4570C
Q201, 202	TRANSISTOR	2SC2705
Q203−206	TRANSISTOR	2SA1145
Q207, 208	TRANSISTOR	2SC2705
Q211, 212	TRANSISTOR	2SC2705
Q213, 214	TRANSISTOR	2SA1145
Q281, 282	TRANSISTOR	2SC2240
D201−208	DIODE	1SS252
D209−212	ZENER DIODE	MTZJ3.3
D213, 214	DIODE	1SS252
D215−218	ZENER DIODE	MTZJ22D
D219, 220	DIODE	1SS252
D281−286	DIODE	1SS252

CAPACITORS

Mark No.	Description	Parts No.
C201, 202	ELECT. CAPACITOR	CEAS2R2M50
C203, 204	CERAMIC CAPACITOR	CKCYB471K50
C205, 206	ELECT. CAPACITOR	CEAS101M50
C207−210	CERAMIC CAPACITOR	CCCSL560K500
C211, 212	ELECT. CAPACITOR	CEAS2R2M50
C213−216	CERAMIC CAPACITOR	CCCSL151K500
C217−220	AUDIO FILM CAPACITOR	CFTXA104J50
C281, 282	ELECT. CAPACITOR	CEAS2R2M50
C283, 284	ELECT. CAPACITOR	CEAS101M25
C285	CKA (0.01μF/AC250V)	ACG1005

RESISTORS

Mark No.	Description	Parts No.
R211, 212	CARBON FILM RESISTOR	RD1/4PMF821J
R213−216	CARBON FILM RESISTOR	RD1/4PMF270J
R221−224	CARBON FILM RESISTOR	RD1/4PMF102J
R229−232	CARBON FILM RESISTOR	RD1/4PMF680J
R233, 234	CARBON FILM RESISTOR	RD1/2PM562J
R235, 236	METALFILM RESISTER	RN1/4PC3001F
R237, 238	METALFILM RESISTER	RN1/4PC8200F
R239−242	FUSIBLE RESISTOR	RF1/4PS101J
R243−246	CARBON FILM RESISTOR	RD1/4PMF271J
R247−250	FUSIBLE RESISTOR	RF1/4PS4R7J
R251−254	CARBON FILM RESISTOR	RD1/4PMF470J
R255−258	CARBON FILM RESISTOR	RD1/4PMF151J
R259−266	FUSIBLE RESISTOR	RF1/4PS4R7J
R267−270	RESISTOR (0.33Ω, 5W)	ACN7001
R271, 272	METAL OXIDE RESISTOR	RS2LMF100J
R281−288	CARBON FILM RESISTOR	RD1/4PMF222J
R295, 296	CARBON FILM RESISTOR	RD1/4PMF101J
	Other Resistors	RD1/8PM□□□J

OTHERS

Mark No.	Description	Parts No.
	CABLE HOLDER (8P)	AKT1081
CN201	CONNECTOR (5P)	KPE5
CN203	CONNECTOR (4P)	KPE4
CN204, 205	4P PLUG	KM200IA4

FM／AM TUNER MODULE

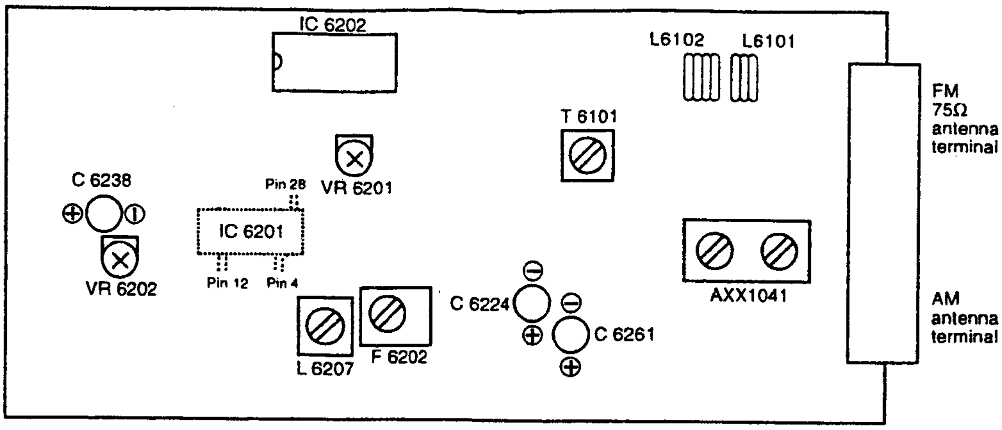

IC 6202
L6102
L6101
FM
75Ω
antenna
terminal
T 6101
C 6238
Pin 28
VR 6201
IC 6201
Pin 12
Pin 4
VR 6202
C 6224
C 6261
AXX1041
AM
antenna
terminal
L 6207
F 6202

Fig. 1 — 2　Adjustment Points

No.	Pin Name	I/O	Description	Act.
35	ST. SURR PD1/S1	I	Chip/Enable output for LV1010 (DSP)	L
36	ST. 66320 PD2/S2	I	Chip/Enable output for M66320	H
37	T. CE PD3/S3	I	Chip/Enable output for LM7001 (PLL)	L
38	PD4/S4	–	——	–
39	PD5/S5	I	——	–
40	PD6/S6	I	——	–
41	S4 PD7/S7	O	FL segment output 4	–
42 | 49	S5 PF0/S8 | S12 PF7/S15	O	FL segment output 5/Key scan output 1 | FL segment output 12/Key scan output 8	–
50 | 52	S13 | S15	O	FL segment output 13/Key scan output 9 | FL segment output 15/Key scan output 11	–
53	S16	O	FL segment output 16	–
54	S17	O	FL segment output 17	–
55 | 60	S18 T15/S21 | S23 T10/S26	O	FL segment output 18 | FL segment output 23	–

No.	Pin Name	I/O	Description	Act.
61	T1 T9/S27	O	FL timing output 1	–
62	T2 T8/S28	O	FL timing output 2	–
63 | 70	T3 | T10	O	FL timing output 3 | FL timing output 10	–
71	−VFDP Vfdp	–	FL driver power supply	–
72	VDD	–	+5V power supply	–
73	NC	–	——	–
74	CLOCK PG0	O	CLOCK output for TC9163/M66320/LM7001/LV1010	–
75	DATA PG1	O	DATA output for TC9163/M66320/LM7001/LV1010	–
76	T. MUTE PG2	O	TUNER: MUTE	H
77	STEREO PG3	I	TUNER: STEREO input	H
78	SRin DET/RDS. CK PE0/EC0/INT0	–	——	–
79	SYNC. DET PE1/EC1/INT1	–	——	–
80	WAKE UP PE2/INT2	I	WAKE-UP (AC pulse for BACK-UP) input	–

● Key Matrix

	KO1	KO2	KO3	KO4	KO5	KO6	KO7	KO8	KO9	KO10
KI1	——	TUNER MEMORY	CD	3CH	PHONO	POWER	VIDEO	ASC1	——	DESTINATION 1
KI2	BAND	ENTER	DISP	SFC	TUNER	——	RETURN	ASC2	VCR1	DESTINATION 2
KI3	MPX	SELECT	SBASS	DOLBY	LD	SPEAKER A	SPEAKER B	ASC MONO	TAPE 2	DESTINATION 3

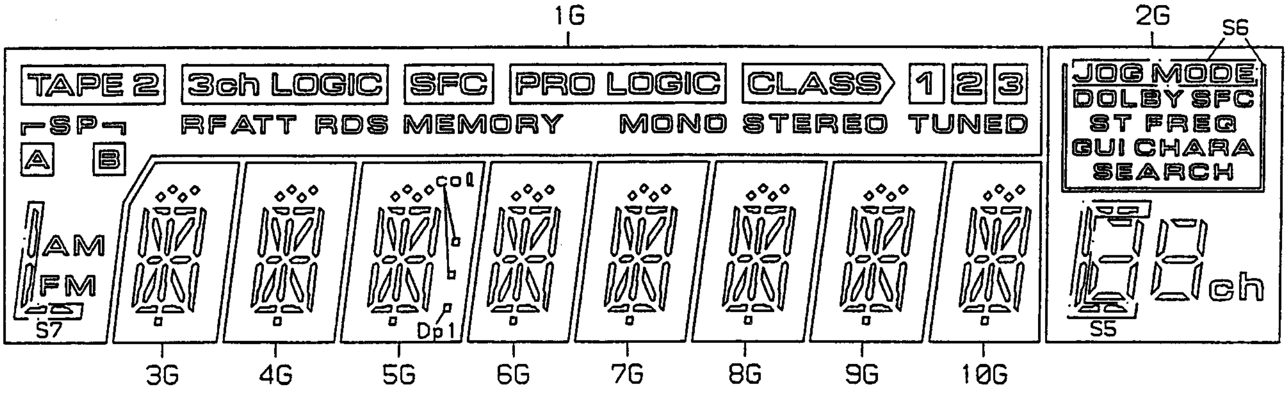
	VSX−454, VSX−464S	VSX−504S
Destination 1	OFF	OTHER
Destination 2	OFF	
Destination 3	OFF	

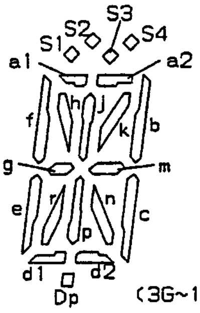
8. FL INFORMATION

■ AAV7013 (V901: FL AND UCOM ASSY)

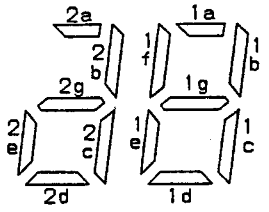
● FL TUBE

● Grid Assignment


1G
2G
S6
TAPE 2
3ch LOGIC
SFC
PRO LOGIC
CLASS
1
2
3
SP
A
B
RFATT
RDS
MEMORY
MONO
STEREO
TUNED
JOG MODE
DOLBY SFC
ST FREQ
GUI CHARA
SEARCH
AM
FM
S7
col
Dp1
ch
S5
3G
4G
5G
6G
7G
8G
9G
10G


S1
S2
S3
S4
a1
a2
h
j
f
k
b
g
m
e
r
n
c
p
d1
d2
Dp

(3G~10G)

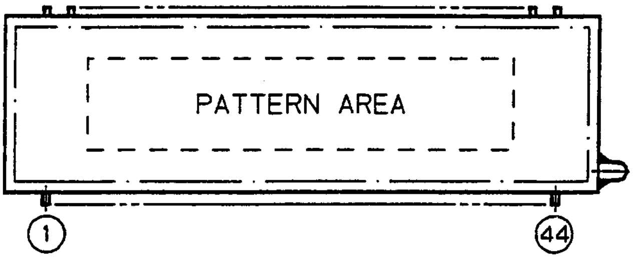

2a
1a
2
b
1
f
1
b
2g
1g
2
e
2
c
1
e
1
c
2d
1d

(2G)

● Anode Connection

	1G	2G	3G,4G	5G	6G~10G
P1	S7	S5	a1	a1	a1
P2	FM	2a,2d	a2	a2	a2
P3	AM	2b	h	h	h
P4	A	2g	j	j	j
P5	B	2c	k	k	k
P 6	SP	2e	b	b	b
P 7	TAPE 2	1a	f	f	f
P 8	RFATT	1b	m	m	m
P 9	3ch LOGIC	1f	g	g	g
P10	RDS	1g	c	c	c
P11	SFC	1c	e	e	e
P12	MEMORY	1e	r	r	r
P13	PRO LOGIC	1d	p	p	p
P14	MONO	ch	n	n	n
P15	TUNED	S6	d1	d1	d1
P16	3	SFC	d2	d2	d2
P17	2	FREQ	Dp	Dp	Dp
P18	1	CHARA	S3	S3	S3
P19	CLASS	SEARCH	S1	S1	S1
P20	STEREO	GUI	S4	S4	S4
P21	-	-	S2	S2	S2
P22	-	DOLBY	-	col	-
P23	-	ST	-	Dp1	-

● Pin Assignment


PATTERN AREA
1
44

● Pin Connection

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
CONNECTION	F1	F1	NP	NP	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NC	NC	NC	P23	P22	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	NP	NP	F2	F2

NOTE 1) F1,F2 --- Filament
2) NP ------ No pin
3) NC ------ No connection
4) DL ------ Datum Line
5) 1G~10G --- Grid

9. DISASSEMBLY

CAUTION !

You will get an electric shock if you touch the Radiator (Heat-sink) when the power cord is connected to the power source. Also, the Electrolytic Capacitor contains a charge even when the power cord is unplugged, so the charge must be removed when the bonnet has been taken off.

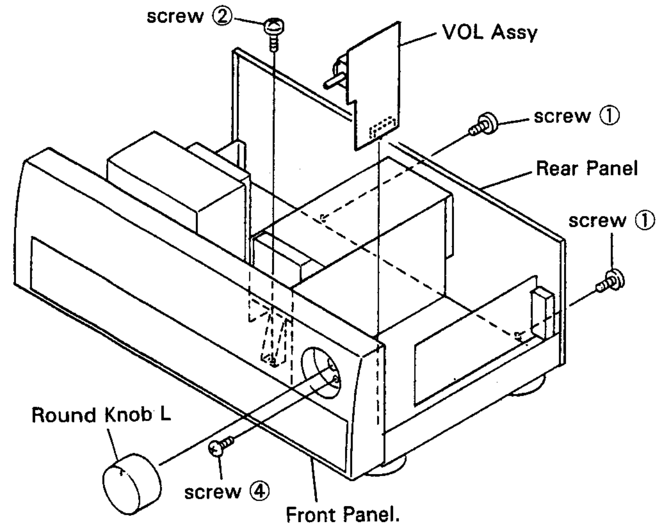
< Removing the Charge >

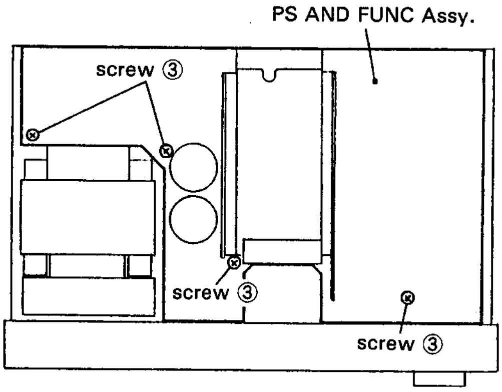
① Connect the Radiator (top side) and either the Chassis or the Rear panel for 2 to 3 seconds with a Resistor of more than 5W/10Ω.

② Connect the +B lead on the J2 and either the Chassis or the Rear panel for 2 to 3 seconds with a Resistor of more than 5W/10Ω.

9.1 PS AND FUNC ASSY

1. Remove the Bonnet case.
2. Remove the two screws ①.
3. Remove the screw ②.
4. Remove the four screws ③ holding the PS AND FUNC assy.
5. Remove the Round knob L and remove the screw ④ between the volume and the front panel.
6. Remove the VOL assy from the PS AND FUNC assy.
7. Remove the rear panel, and power block from the chassis at the same time, according to the Fig. 1


screw ②
VOL Assy
screw ①
Rear Panel
screw ①
Round Knob L
screw ④
Front Panel.


PS AND FUNC Assy.
screw ③
screw ③
screw ③

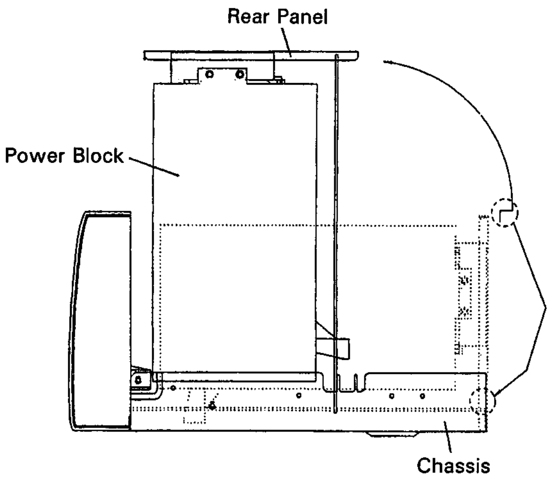
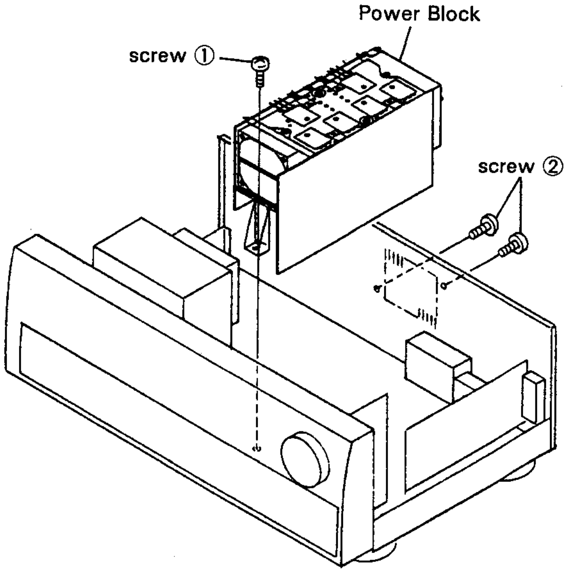

Rear Panel
Power Block
Chassis

Fig. 1

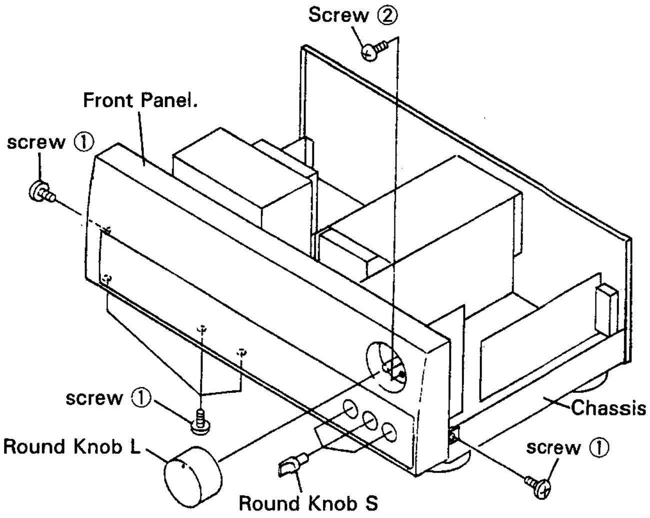
9.2 POWER BLOCK

1. Remove the Bonnet case.
2. Remove the screw ①.
3. Remove the two screws ②.


Power Block
screw ①
screw ②

9.3 FL AND UCOM ASSY

1. Remove the Bonnet case.
2. Remove the five screws ①.
3. Remove the Round knob L and remove the screw ② between the volume and the front panel.
4. Remove the front panel from the chassis (watching out for the claw on the front panel bottom).
5. Remove the three round knob S (BASS, TREBLE, BALANCE).
6. Remove the screws in Fig. 2 and remove the FL AND UCOM assy.


Screw ②
Front Panel.
screw ①
screw ①
Round Knob L
Round Knob S
Chassis
screw ①

<Location of the FL AND UCOM assy Fixing Screws>

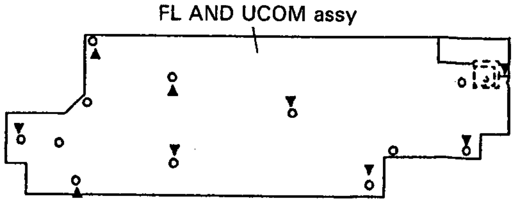

FL AND UCOM assy

Fig. 2

Points where the PCB Mold (AMR2533) is attached to the chassis: 7 points stamped on the chassis as Nos. 0, 1, 2, 3, 4, 7, and 10.

10. REMOTE CONTROL UNIT [CU−VSX095 (AXD7045)]
[CU−VSX098 (AXD7056)]

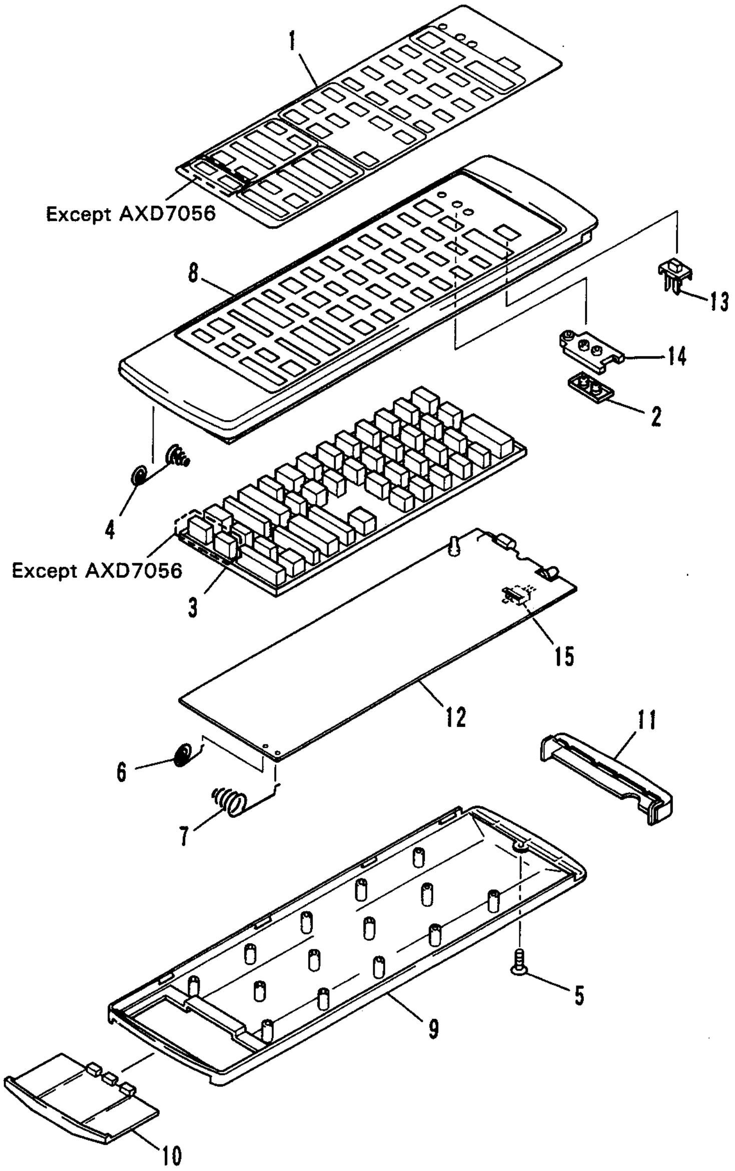
10.1 EXPLODED VIEW AND PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts List

Mark	No.	Description	Parts No.
	1	PLATE (For AXD7045)	AZA2005
	1	PLATE (For AXD7056)	AZA7099
	2	RUBBER SHEET (A) (S102)	AZA1985
	3	RUBBER SHEET (B) (S103) (For AXD7045)	AZA2006
	3	RUBBER SHEET (B) (S103) (For AXD7056)	AZA7098
	4	TERMINAL	AZB1334
	5	SCREW	AZB1335
	6	TERMINAL (A)	AZB1379
	7	TERMINAL (B)	AZB1380
	8	CASE (A)	AZN2254
	9	CASE (B)	AZN2255
	10	BATTERY COVER	AZN2256
	11	FILTER	AZN2257
NSP	12	P. C. BOARD	AZN2258
	13	KNOB (VIDEO/AUDIO)	AZN2259
	14	FRAME	AZN2260
	15	SLIDE SW (S101)	AZS1134



10.2 PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10¹ → 561 .... RD1/8PM $\boxed{5}\,\boxed{6}\,\boxed{1}$ *J*
47kΩ → 47 × 10³ → 473 .... RD1/4PS $\boxed{4}\,\boxed{7}\,\boxed{3}$ *J*
0.5Ω → 0R5 .... RN2H $\boxed{0}\,\boxed{R}\,\boxed{5}$ *K*
1Ω → 010 .... RS1P $\boxed{0}\,\boxed{1}\,\boxed{0}$ *K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62kΩ → 562 × 10¹ → 5621 .... RM1/4PC $\boxed{5}\,\boxed{6}\,\boxed{2}\,\boxed{1}$ *F*

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC1	μ−COM	AZC1841
	IC2	IC	PST9121N
	Q1	CHIP TRANSISTOR	2SC3265
	D1	LED	SE303A−C
	D2	CHIP DIODE	RLS73
	D3	DIODE	SPS−503C−3
	D4, 5	CHIP DIODE	RLS73
	D6	LED	SLC−22VR
CAPACITORS			
	C1	ELECT. CAPACITOR	CEAS221M25
	C2	ELECT. CAPACITOR	CEAS101M10
	C3	ELECT. CAPACITOR	CEAS0R1M50
	C4, 5	CERAMIC CAPACITOR	CCDSL330J50
	C6	ELECT. CAPACITOR	CEAS101M10
	C7	CERAMIC CAPACITOR	CCDSL101J50
	C8	ELECT. CAPACITOR	CEAS0R1M50
RESISTORS			
	R1	CARBON FILM RESISTOR	RD1/4PM020J
		Other resistors	RD1/8PM□□□J
OTHERS			
	X1	RESONATOR	FCR4.0MC3

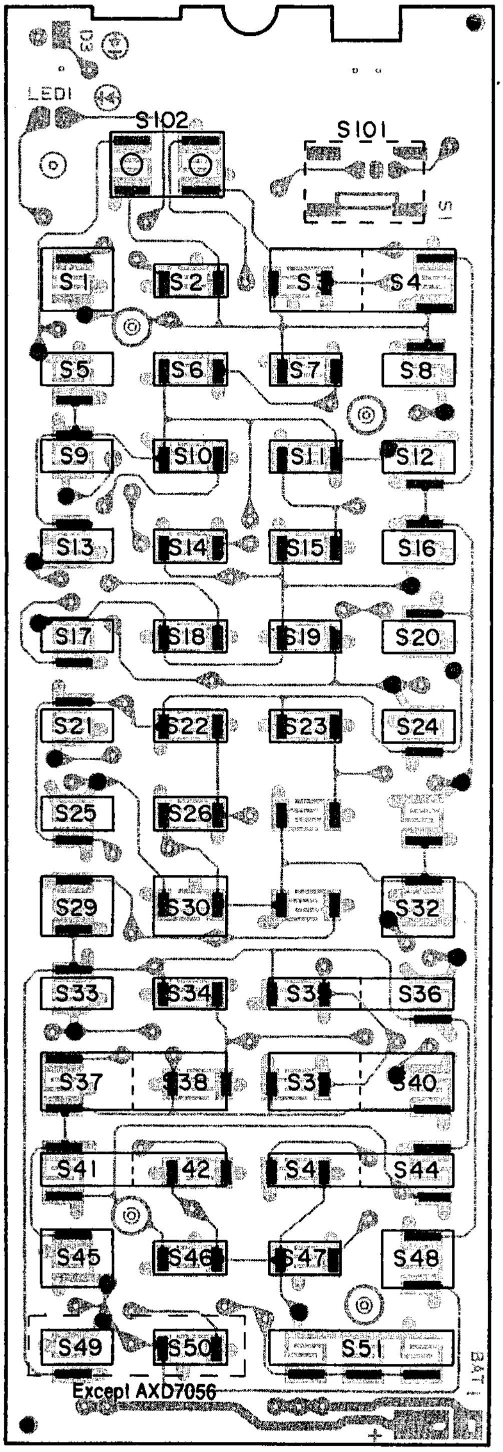
10.3 PCB PATTERN

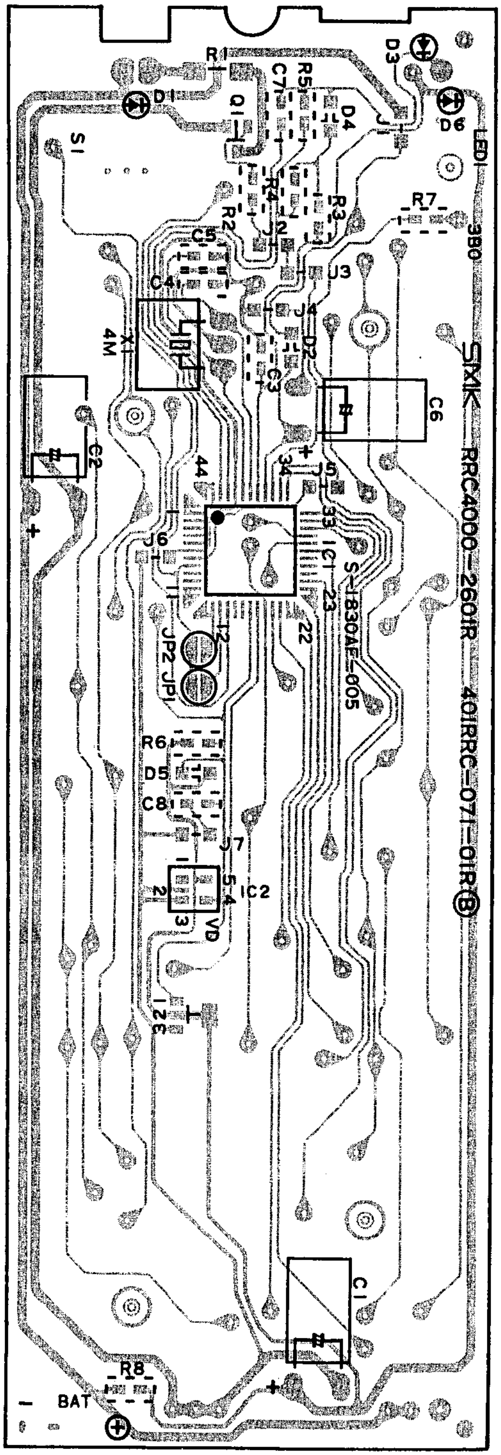
⬚ : Indicates a chip resistor.

⬚ : Indicates a chip capacitor.

⊣ : Indicates a chip transistor.

⊕ : Indicates a chip diode.


D3
LED1
S102
S101
S1
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S22
S23
S24
S25
S26
S29
S30
S32
S33
S34
S35
S36
S37
S38
S39
S40
S41
42
S43
S44
S45
S46
S47
S48
S49
S50
S51
BAT
Except AXD7056


R1
D3
C7
R5
D1
Q1
D4
D6
LED1
S1
R4
R2
R3
R7
3B0
J2
C5
J3
C4
J4
X1
4M
D2
C3
C6
C2
SXK RRC4000-2601R 401RRC-071-01R B
44
34
J5
33
IC1
S-1830AE-005
J6
23
22
JP2 JP1
R6
D5
C8
J7
5
4
IC2
2
3
VD
3
2
C1
R8
BAT

10.4 SCHEMATIC DIAGRAM

NOTE

-▭- : Indicates a chip resistor.

-╫- : Indicates a chip capacitor.

: Indicates a chip transistor.

: Indicates a chip diode.

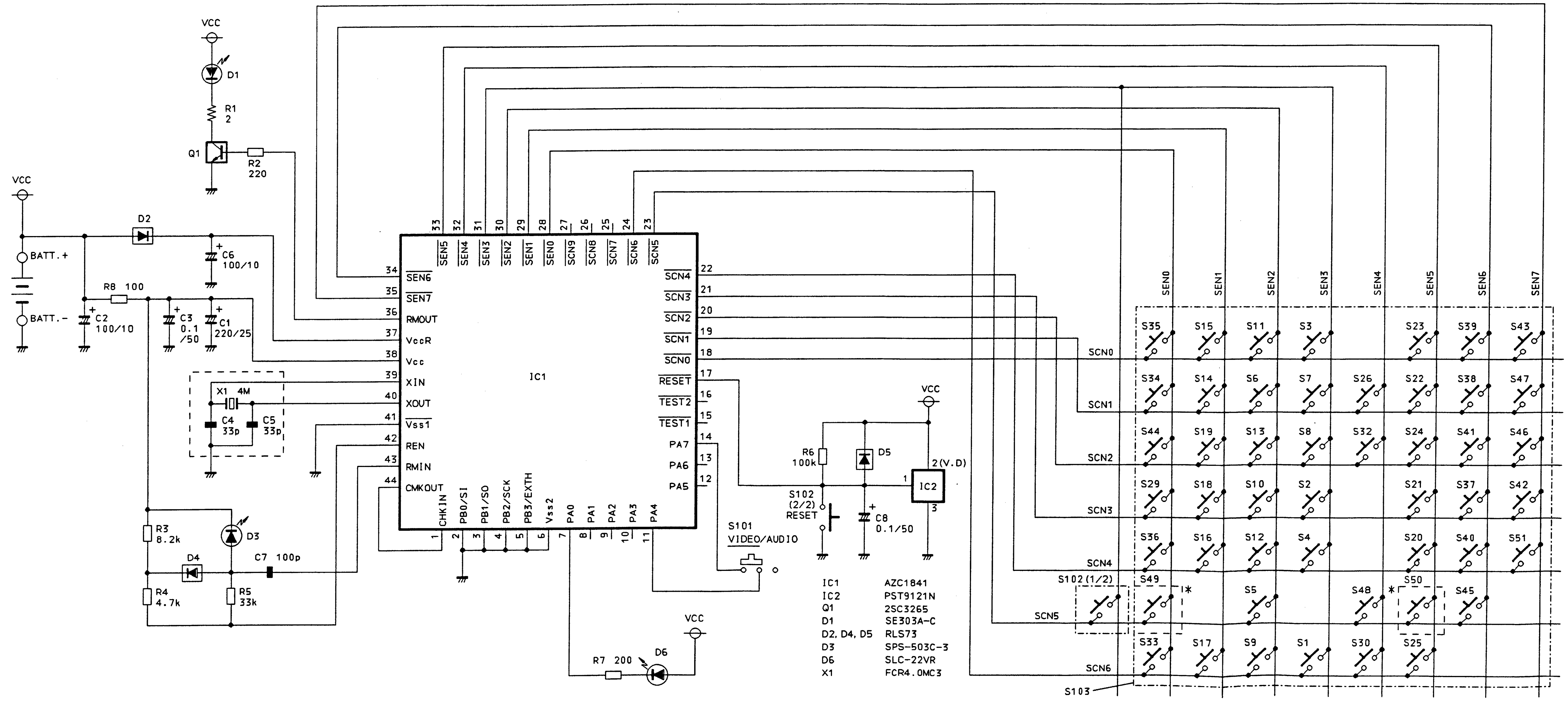
NOTE FOR SCHEMATIC DIAGRAMS (Type 2A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭ or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   ⇦ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH−□ ON THE SCHEMATIC DIAGRAM:**
   - SCH−□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

S101: AUDIO/VIDEO
S102: LEARN·RESET
S1: RECEIVER POWER
S2: MUTING
S3: MUSTER VOLUME −
S4: MUSTER VOLUME +
S5: TV POWER
S6: 1
S7: 2
S8: 3
S9: BAND TV FUNC
S10: 4 TUNER/TV
S11: 5
S12: 6
S13: 0/10
S14: 7
S15: 8
S16: 9
S17: FREQUENCY TV VOLUME −
S18: FREQUENCY TV VOLUME +
S19: STATION TV CHANNEL −
S20: STATION TV CHANNEL +
S21: SURR MODE
S22: 3CH LOGIC
S23: TEST TONE
S24: CENTER MODE (DELAY TIME)
S25: CENTER LEVEL·REAR LEVEL −

S26: CENTER LEVEL·REAR LEVEL +
S29: FUNCTION
S30: TAPE2 MONITOR
S32: SLEEP RETURN
S33: DISC SELECT − (DISC SIDE A) CD/LD
S34: DISC SELECT + (DISC SIDE B)
S35: DECK I (VCR CH −) TAPE/VCR
S36: DECK II (VCR CH +)
S37: ■ CD/LD
S38: ▶
S39: ◀ TAPE/VCR
S40: ▶
S41: ⏮ (◀◀) CD/LD
S42: ⏭ (▶▶)
S43: ◀◀ TAPE/VCR
S44: ▶▶
S45: POWER CD/LD
S46: ⏸
S47: ■ TAPE/VCR
S48: POWER
S49: ASC1
S50: ASC2
S51: TAPE SELECT TV/VCR

SCH-8


VCC
D1
R1 2
Q1
R2 220
VCC
D2
BATT.+
BATT.−
R8 100
C6 100/10
C2 100/10
C3 0.1 /50
C1 220/25
X1 4M
C4 33p
C5 33p
R3 8.2k
D3
D4
C7 100p
R4 4.7k
R5 33k
IC1
SEN5 SEN4 SEN3 SEN2 SEN1 SEN0 SCN9 SCN8 SCN7 SCN6 SCN5
SEN6 SEN7 RMOUT VccR Vcc XIN XOUT Vss1 REN RMIN CMKOUT
SCN4 SCN3 SCN2 SCN1 SCN0 RESET TEST2 TEST1 PA7 PA6 PA5
CHKIN PB0/SI PB1/SO PB2/SCK PB3/EXTH Vss2 PA0 PA1 PA2 PA3 PA4
R7 200
D6
VCC
S101 VIDEO/AUDIO
S102 (2/2) RESET
R6 100k
D5
C8 0.1/50
IC2
2(V.D)
VCC
SEN0 SEN1 SEN2 SEN3 SEN4 SEN5 SEN6 SEN7
SCN0 SCN1 SCN2 SCN3 SCN4 SCN5 SCN6
S102(1/2)
S103

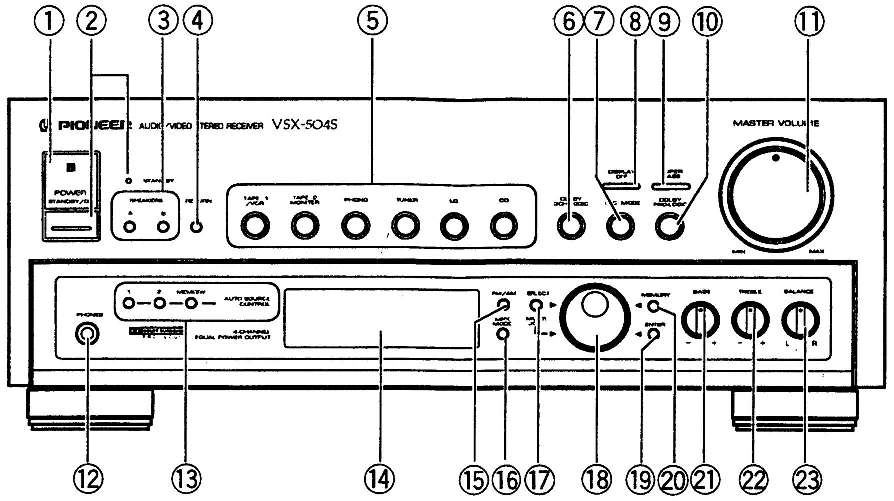
IC1	AZC1841
IC2	PST9121N
Q1	2SC3265
D1	SE303A-C
D2, D4, D5	RLS73
D3	SPS-503C-3
D6	SLC-22VR
X1	FCR4.0MC3

Note: * Except AXD7056

11. PANEL FACILITIES

FRONT PANEL FACILITIES (For VSX−504S)

Illustration shows multi-voltage model.



① Remote sensor

② POWER STANDBY/ON switch

STANDBY indicator (Multi-voltage model only)

This is the switch for electric power.

ON : When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

(Multi-voltage model only)
The STANDBY indicator lights when the power is set to STANDBY, and goes out when set to ON.

(Timer ON/OFF possible)
When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:
When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

③ SPEAKERS buttons (A,B)

ON/OFF switches for the A and B speaker systems.

④ RETURN button

Press this button to return the receiver to its initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME control.

TAPE 2 MONITOR .... OFF
MUTING .... OFF
SFC MODE .... OFF
FUNCTION .... TUNER
SUPER BASS .... OFF

And SPEAKERS buttons switch as follows.

Before pressing the RETURN button		After pressing
Both A and B are off	→	Only A is on
Only A is on	→	No change
Only B is on	→	Both A and B are on
Both A and B are on	→	No change

NOTE:
Press the RETURN button, and the frequency last selected is received. If reception of the frequency last selected is not possible, the mode automatically switches to AUTO TUNING.

⑤ Input selector buttons

TAPE 1/VCR
: Press when performing playback on a VCR unit or cassette deck.

TAPE 2 MONITOR
: Press when performing playback on a second cassette deck and when monitoring recording.

PHONO : Press when playing records on a turntable.
TUNER : Press when listening to radio broadcasts.
LD : Press when performing playback on an LD player.
CD : Press when playing compact discs on a CD player.

⑥ DOLBY 3CH LOGIC button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the DOLBY SURROUND mark.

⑦ SFC MODE button

Each time you press it, the mode and the display indications change as follows.

┌→ STUDIO → SIMULATED SURROUND ┐
└──── off ←──── ARENA ←──────┘

⑧ DISPLAY OFF button

This switches the display OFF.

⑨ SUPER BASS button

Press this button when you want to boost the bass.

⑩ DOLBY PRO-LOGIC button

Switches DOLBY PRO-LOGIC SURROUND on and off.

⑪ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center, and rear speakers.

⑫ PHONES jack

Connect the plug on your headphones to this jack. Set SPEAKERS A and B switches to OFF if you want to cut the sound from the speakers and listen to it only through the headphones.

⑬ AUTO SOURCE CONTROL buttons

1, 2 buttons:
These buttons are for memorizing and recalling your current settings. Both 1 and 2 can be used to memorize settings. If you connect another component, such as a CD player, to the CONTROL OUT jack on the rear panel, the signals to switch power on and start play are also transmitted.

MEMORY:
Use when memorizing settings to a 1, 2 button.

⑭ Display section

⑮ FM/AM button

Use this to switch between FM and AM frequency band reception.

⑯ MPX MODE button

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the MONO indicator in the display section is lit.

Auto stereo mode
Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:
This button has no effect on reception of AM broadcasts.

⑰ SELECT button

Press this button to switch to the station mode. Then you can turn the MULTI-JOG to select a station.
When in the Frequency mode, tuning the MULTI-JOG raises or lowers the frequency.

⑱ MULTI-JOG

Use during tuner operation to select frequencies and station numbers.

⑲ ENTER button

Press this button when you are in the frequency preset mode, and the displayed frequency is memorized in the selected station. (Station indications stop flashing and stay lit.)

⑳ MEMORY button

Press this button to switch to the frequency preset mode.

㉑ BASS control

Use to adjust the low-frequency level. Turn clockwise to boost bass, and counterclockwise to attenuate bass.

㉒ TREBLE control

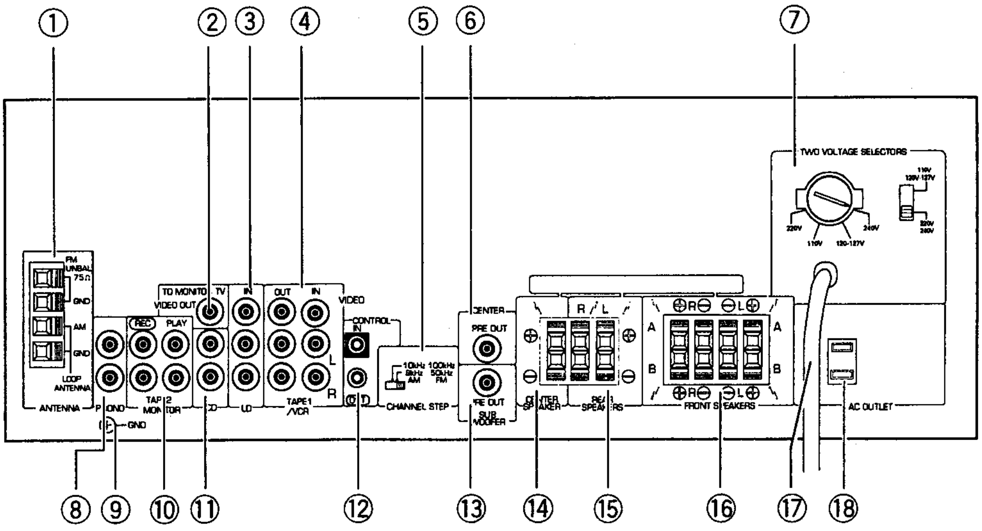
Use to adjust the high-frequency level. Turn clockwise to boost treble, and counterclockwise to attenuate treble.

㉓ BALANCE control

Use to adjust the sound volume balance between left and right speakers.
L: Decreases the sound on the right side.
R: Decreases the sound on the left side.
Usually, left and right volume levels should be the same.

REAR PANEL FACILITIES (For VSX−504S)

Illustration shows Multi-voltage model.


①
②
③
④
⑤
⑥
⑦
FM UNBAL 75Ω
GND
AM
GND
LOOP ANTENNA
ANTENNA
PHONO
GND
REC
PLAY
TAPE 2 MONITOR
TO MONITOR TV
VIDEO OUT
CD
IN
LD
OUT
IN
TAPE1 /VCR
VIDEO
L
R
CONTROL
IN
OUT
10kHz 9kHz AM
100kHz 50kHz FM
CHANNEL STEP
CENTER
PRE OUT
PRE OUT
SUB WOOFER
CENTER SPEAKER
R / L
REAR SPEAKERS
⊕R⊖ ⊖L⊕
A
B
FRONT SPEAKERS
TWO VOLTAGE SELECTORS
220V
110V
120-127V
240V
110V 120V-127V
220V 240V
AC OUTLET
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱

① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.

② VIDEO OUT (TO MONITOR TV) jack

Connect to a monitor TV or to TV sets with video input terminals to watch program materials from a VCR or LD player connected to this unit.

③ LD input jacks

Connect to an LD player's output jacks (audio, video).

④ TAPE 1/VCR jacks

Connect to the first cassette deck or a VCR. With a VCR, also connect the video jacks.

⑤ CHANNEL STEP switch (Multi-voltage model only)

⑥ CENTER PRE OUT jack

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

⑦ TWO VOLTAGE SELECTORS switches (Multi-voltage model only)

⑧ PHONO input jacks

Connect to the output cables from a turntable.

⑨ GND terminal

Connect the turntable ground lead to this terminal.

⑩ TAPE 2 MONITOR jacks

Connect to audio components such as a second cassette deck or a graphic equalizer.

⑪ CD input jacks

Connect to the output jacks of a compact disc player.

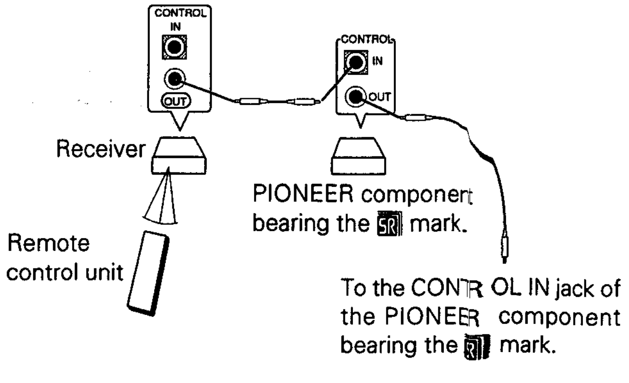
⑫ CONTROL IN/OUT jacks

IN :Connect this jack to other Pioneer components when using those components to control this unit.

OUT :Connect this jack to other Pioneer components when using the remote control of this unit to control the other components.

NOTE :

The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.


CONTROL
IN
OUT
CONTROL
IN
OUT
Receiver
PIONEER component bearing the ▣ mark.
Remote control unit
To the CONTROL IN jack of the PIONEER component bearing the ▣ mark.

⑬ SUB WOOFER PRE OUT jack

If you want to boost the low frequencies, connect to a subwoofer power amplifier.

⑭ CENTER SPEAKER terminals

Connect the center speaker to these terminals.

NOTE :

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctions or breakdowns may occur when conductors come into contact with each other. Use a center speaker with an impedance of 8 Ω to 16 Ω.

⑮ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

NOTES:

- *Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctions or breakdowns may occur when conductors come into contact with each other. Use rear speakers with an impedance of 8 Ω to 16 Ω.*
- *Be sure to connect two speakers (L, R). There will be no sound if only one speaker is connected.*

⑯ FRONT SPEAKERS terminals

A :Connect to the first set of speakers.
B :Connect to the second set of speakers.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctions or breakdowns may occur when conductors come into contact with each other. Use front speakers with an impedance of 8 Ω to 16 Ω .

⑰ Power cord

⑱ AC OUTLET

(U.S. and Canadian models)
〔SWITCHED 100 W (0.8 A) MAX〕
Power supplied through this outlet is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W (0.8 A).

(Multi-voltage model)
〔SWITCHED 100 W MAX〕
Power supplied through this outlet is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W .

NOTES:

- *This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*
- *Do not connect appliances with high power consumption such as heaters, irons, or television sets to this AC OUTLET in order to avoid overheating and fire risk. This can cause the receiver to malfunction.*

CAUTION:
DO NOT CONNECT MONITOR OR TV SET.

12. SPECIFICATIONS

For VSX−504S

Amplifier Section

Continuous average power output of 150 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

[Multi-voltage model only]

Continuous Power Output (DIN)	
Front (1kHz, T.H.D. 1%, 8 Ω)	165 W+165 W
Continuous Power Output	
Front	110 W + 110 W (1kHz, 0.8%, 8 Ω)
Center	110 W (1kHz, 0.8%, 8 Ω)
Rear	110W (1kHz, 0.8%, 8 Ω)
Dynamic Power (2 Ω /4 Ω/8 Ω)	350 W/280 W/180 W
Input (Sensitivity/Impedance)	
PHONO MM	2.8 mV/47 kΩ
CD, TAPE 1/VCR, TAPE 2, LD	200 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1%, 1 kHz)	
PHONO MM	100 mV
Frequency Response	
PHONO MM	20 Hz to 20,000 Hz ± 0.3 dB
CD, TAPE 1/VCR, TAPE 2, LD	5 Hz to 100,000 Hz $^{+0}_{-3}$dB
Output (Level/Impedance)	
TAPE 1/VCR REC, TAPE 2 REC	200 mV/2.2 kΩ
Tone Control	
BASS	± 8 dB (150 Hz)
TREBLE	± 8 dB (10 kHz)
SUPER BASS	+8 dB (80 Hz)
Signal-to-Noise Ratio (IHF, short circuited, A network)	
PHONO MM	76 dB
CD, TAPE 1/VCR, TAPE 2, LD	97 dB
Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]	
PHONO MM	77 dB
CD, TAPE 1/VCR, TAPE 2, LD	80 dB

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.*

** *Measured by Audio Spectrum Analyzer.*

VIDEO Section

Input (Sensitivity/Impedance)	
VCR, LD	1 Vp-p/75 Ω
Output (Level/Impedance)	
VCR REC	1 Vp-p/75 Ω
Frequency Response	
VCR, LD→ MONITOR	5 Hz to 7 MHz $^{+0}_{-3}$dB
Signal-to-Noise Ratio	55 dB
Cross Talk	55 dB

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono:11.2 dBf, IHF (1.0 µV/75 Ω)
50 dB Quieting Sensitivity	Mono: 16.8 dBf Stereo: 38.6 dBf
Signal-to-Noise Ratio	Mono: 73 dB (at 85 dBf) Stereo: 70 dB (at 85 dBf)
Distortion	Stereo: 0.5 % (1 kHz)
Alternate Channel Selectivity	60 dB (400 kHz)
Stereo Separation	40 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz (± 1) dB
Antenna Input	75 Ω unbalanced

AM Tuner Section

Frequency Range	531 kHz to 1,602 kHz (9 kHz step) 530 kHz to 1,700 kHz (10 kHz step)
Sensitivity (IHF, Loop antenna)	350 µV/m
Selectivity	25 dB
Signal-to-Noise Ratio	50 dB
Antenna	Loop antenna

Miscellaneous

Power Requirements	
U.S. and Canadian models	AC 120 V, 60 Hz
Multi-voltage model	AC 110 V/120-127 V/220 V/240 V (Switchable), 50/60 Hz
Power Consumption	
U.S. and Canadian models	340W, 500VA
Multi-voltage model	905 W
In Standby Condition	3W
AC Outlets	
U.S. and Canadian models	
SWITCHED	100 W (0.8 A) MAX
Multi-voltage model	
SWITCHED	100 W MAX
Dimensions	420 (W) X 155 (H) X 300 (D) mm 16-9/16 (W) X 6-1/8 (H) X 11-13/16 (D) in
Weight (without package)	9.5 kg (20 lb 15 oz)

Furnished Parts

FM Antenna	1
AM Loop Antenna	1
Dry Cell Batteries [size "AAA" (IEC LR03/AM-4)]	2
Remote Control Unit	1
Operating Instructions	1

NOTE:

Specifications and the design are subject to possible modifications without notice, due to improvements.

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